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SOURCE

Chemical Prices Start on Page 36



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MAPARIAR SACILIDADA SALA

IN SCORED: Lawmakers ы FDA for lax efforts in moniargresidues of banned pestiwis on foods being imported rateUS......Page 3

MCY LAUNCH: American Cranamid Company hopes to brition a \$200 million mater with a new line of or-Page 3

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KHERING AIMS: Schering-ि ज़ो 's CEO told security ana has week that his comrearnings per share ^{१७अ}क्षर**с**өөd **\$**5. . . . **. Page 9**

OV PONT'S PET: Du Pont added another barrier plassproduct to its 'Selar' line that expected to significantly in-Asse PET use. . . . Page 54

AADAPTS: After more than i^{decade} of painful adjust-^{ants, European chemical firms} ^{# lace} an uncertain future confidence. . . . Page 54

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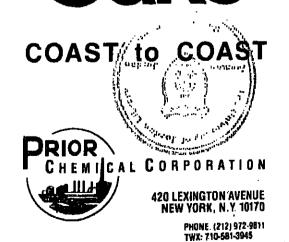
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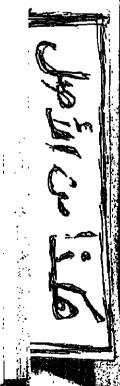
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BASF Acquires 'Zerex' Antifreeze Line

from foreign competition from foreign pro-

ducers and rising energy and environmental

control costs, Mr. Duncan says PPG's mis-

sion has been to reposition and restructure its

chemicals business, following strategies that

\$500 million in facilities efficiency and pro-

ductivity improvements during the past five

years, with nearly \$300 million dedicated to

PPG's chloralkali business and \$100 million

to its potash business. Group employment

MOVE TO SPECIALTIES

we felt that making a massive commitment

to the specialty chemicals business wasn't

going to be as attractive or easy as everyone

was making it out to be," he says. "There

simply isn't enough room on that particular

our chemicals product portfolio, maintaining

a commitment to our existing commodity

businesses, where we enjoyed positions of

strength, while growing in existing and new businesses — particularly in the value-added

category."
PPG has focused its international chemi-

cals expansion on the Far East, where a num-

ber of new initiatives have been taken during

recently expanded Mobile, Ala., plant, at

Longview, Wash., and at the company's Brad-

Cyanamid said last week that it has now

completed an expansion of the Bradford

plant, nearly doubling the facility's original

capacity for dry polyacrylamide polymers.

The plant supplies markets in the US and

posed of four product lines: "Magnifloc" floc-

culants for water and waste treatment; "Su-

perfloc" for mining; "Accoal-Floc" for coal

processing; and "Accurac" retention aids for

for use in chemical, pharmaceutical, indus-

thickeners in the gold mining industry, ac-

cording to the company.

Cyanamid says the "Accoal-Floc" floccu-

lants provided savings of up to 30 percent in

reduced polymer usage during plant evalua-tions, while the "Accurac" products demon-

strated significant increases in first-pass re-

capability to produce polyacrylamide polymers at 12 additional plants throughout the

The "Magnifloc" flocculants are designed

the paper-making industry.

the company's strategy, Mr. trial and municipal sludge treatment opera-

Arked "manufacture will be Bradford plants, Cyanamid says it has the Bradford plants, Cyanamid says it has the Bradford plants, to produce polyacrylamide po

Cyanamid's performance series is com-

'Unlike a number of other US companies,

has been reduced by more than one-third.

Mr. Duncan says PPG has invested about

parallel corporate goals.

life raft for everyone.

New Organic Flocculant Line

Andion-a-year organic flocculants ford facility in the UK.

tifreeze business has gone through a major tifreeze to complement its large and growing private maxement last week that BASF Corporation is buythe "Zerex" business from Conoco, Inc.

Led Spring, Union Carbide Corporation, the domideforce in the antifreeze business, sold its popular Photone" line to First Brands Corporation in a lever-Labuvout. In August, Enron Corporation sold its trantifreeze business to Old World Trading Com-

Tehree sales were all undertaken mostly as part imporate strategies, rather than negative reactions Lie antifreeze industry. However, sources say that ther they will partly recast the supply arrange-

mange for 1986, executives of the

olyngh-based firm said last week.

Robert H. Mitchel, PPG's vice-president

immee, and Robert D. Duncan, group

resident for chemicals, told a meeting

ka Louis Society of Financial Analysts,

In Mitchel cites basic goals PPG intends

oxieve by 1995: to strengthen and grow

segme businesses and areas of related

telogy, become a global company with

cellin of its business outside of the US.

forminew businesses, and realize 4 per-

extrapleal sales growth, as well as an

ange 18 percent return on equity over an

ratieve these goals, Mr. Mitchel says,

sominuing to invest in plant modern-

था:a and new technology to maintain

is emphasizing value-added products to a reduce PPG's reliance on commodity

dat expanding customer service capa-det and moving into new businesses

tabutemal development, as well as do-

hars the company expects US gross algroduct growth of about 2.5 percent

द : अर. "which will provide PPG with the

Windly for continued gains in perform-

thowledging that the nation's chemi-

e thance its leading position in the

title with a new "performance se-

a d dry and emulsion polyacry-

hased products to serve the pa-

Rining, water treatment and coal

Performance series is the culmina-

the most highly focused polymer re-

industrial products division," said

A Rulbal, president of the division,

ries briefing last week, at which the

MAMID STRATEGY OUTLINED

Albing the company's strategy, and midd that the market for organic

growth expected, so Cyanamid

chieve growth by going after a big-

Company believes the new series of

Acome. The products are available in

Acluding those in the high cationic

and produces the new series at its

Page of ionic charge and molecular

I introduced the new series.

pment effort in the history

pretty mature," with only

crand foreign acquisitions.

Kemed \$4.54 per share in 1985.

PG Sees Record Earnings,

with the \$5.30 to \$5.50 per slowing growth rates, increased competition

The antifreeze business has a growing private label, bulk, and original equipment manufacturer the IDIN 1900. In Spring, the latest being the anmarkets for "Alugard" antifreeze. The company approached Conoco about buying "Zerex" and found a willing seller.

For its part, Conoco decided to sell "Zerex" after its parent company, Du Pont, said it would restrict the amount of raw material ethylene glycol for Conoco's antifreeze operations beginning next year.

Du Pont is the nation's largest consumer of ethylene glycol for polyester applications, and its consumption far outweighs the company's production capacity at Beaumont, Tex. Conoco decided to focus its antifreeze Continued on Page 31

There are some major changes in the antifreeze business, but they are related to corporate strategies rather than the health of



Chemical Marketing Reporter ...

FDA Gets Low Mark For Pesticide Tests

critical of the Federal government's ef-"We chose, instead, a balanced approach to forts in testing and monitoring imported food for possible contamination by pesticides or chemicals banned in the US.

panned by Environmental Protection Agency and can cause cancer and birth defects, are regularly allowed into the US," Sen. Pete Wilson, (R-Calif.) told a news con-

"The bottom line is this," added Rep. Frank Horton (R-NY) "we don't adequately American Cyanamid Launches test or monitor food shipments - less than 1 percent of the more than one million annual food shipments to the US are tested to any degree. Nor do we enforce these laws through established fine and suspension mecha-

> The General Accounting Office report concludes that Food & Drug Administration's pesticide monitoring program "provides limited protection against public exposure to illegal residues of food.'

According to GAO, the investigative arm of Congress, FDA collected and analyzed 33,687 samples of imported fresh and processed fruits and vegetables from 1979 to 1985, and determined 2,056 (6.1 percent) солtained "illegal pesticide residues.

"The level of contamination of imported foods may be even higher because of the inadequate way in which FDA has set up its monitoring and testing procedures," said Sen.

The report says FDA regularly examines high-volume shipments of fruits and vegetables, but often neglects relatively small-volceeds those currently used in ore and tailings ume shipments. GAO says some foods were not sampled once over a six-year period.

For example, it says FDA analyzed shipments from only 9 of 27 countries exporting cucumbers to the US from 1983 through 1985. A total of 17 countries have not had their cucumber shipments inspected since 1978,

Rep. Horton said he requested the report in July 1985 because of his belief that the government's performance in checking pesti-cide and chemical levels of imported foods was inadequate, largely due to a lack of re-

"I think the report substantiates this con-December 8, 1986

lation last week after releasing a report than \$23 billion in food each year. The public believes that the food it purchases is free

and chemical standards. The report finds that this isn't always the case.' About 600 different pesticides are manu-It's clear large quantities of fruits and factured worldwide. But GAO says FDA has regetables, which contain pesticides that are only a limited knowledge of the pesticides produced and distributed by foreign nations. Consequently, GAO contends it's nearly impossible for FDA to coordinate its monitoring and testing to specific commodities from specific countries

from contamination and meets US pesticide

"It turns out FDA has limited resources to sample foods for pesticides they believe pose

Continued on Page 20



J. Lawrence Wilson, who will succeed Vincent L. Gregory as chairman and chief executive officer of Rohm and Heas Company when Mr. Gregory retires in mid-1988. Mr. Wilson is vice-chairman and director of corporate business for the com-

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CHEMICAL MARKETING REPORTER ONCE DATA GRADA

US Calls for Worldwide Freeze On Chlorofluorocarbons Output

The US last week urged an international panel to consider freezing the production of chlorofluorocarbons at or near current levels and gradually eliminating the chemicals which are strongly suspected of depleting the earth's protective ozone layer. More than 50 nations participated in a five-day conference in Geneva, Switzerland held under the auspices of the United Nations Environmental Pro-

gramme. The countries are seeking agreement on a global program to control CFC's and other man-made chemicals that many scientists believe are de- With Chesebrough stroying ozone in the upper atmosphere.

Richard E. Benedick, the state department's chief negotiator, said CFC emissions from aerosols, air conditioners, refrigerators and other sources should be frozen at 1986 levels, and eventually be eliminated.

"The results of our models and inquiries continue to indicate the existence of a serious and growing threat to the integrity of the ozone layer," he says, adding that CFC emissions have been rising. (See separate story on

"Unlike acid rain or hazardous wastes, this issue needs global action," says Mr. Benedick. "It doesn't do any good if the US cripples its own industry and the rest of the world continues unabated. Unilateral action might provide a short-term blip, but it won't solve the problem."

Another control strategy presented at the Geneva conference was a suggestion by Canada that global production caps be imposed on CFC's gradually, on a country-by-country basis in accordance with a mathematical formula.

These and other options for an enforcement protocol, seeking ways of limiting CFC production, were debated by the negotiators.

Pfizer in Accord **With Angiomedics**

Pfizer, Inc. has entered into a merger agreement with Angiomedics, Inc., a Minnesola corporation engaged in developing manufacturing and marketing diagnostic and the rapeutic catheter products used in the treatment of cardiovascular diseases.

The merger agreement contemplates a cash tender offer by Angiomedics of \$13.25 not per share to the holders of all of its outstanding common stock and warrants. Funds for the purchase will be provided by Pfizer, upon satisfaction of the applicable conditions pursuant to the merger agreement.

The tender offer is conditioned on, among other things, approximately 90 percent of those shares outstanding which are not held by Pfizer being validly tendered and not

Pfizer currently holds 476,191 shares of Angiomedics common stock. The merger is conditioned upon the successful completion of the tender offer, and certain other require-

Guinness Lists Oxychem Show

"Oxylites," Occidental Chemical Corporation's sight-and-sound spectacular, is so unusual it's listed in the 1987 edition of the Guinness Book of World Records.

Because it uses the side of Oxychem's nine-story office building in Niagara Falls, N.Y. as a stage or screen for a Christmas show, Guinness describes "Oxylites" as converting the building into the world's largest sound/music synthe-

The show again will be the featured attraction at the 1986-1987 "Festival of November 29 and runs from 5 p.m. to 11 p.m. nightly through January 11.

The Oxychem system is a computerized color-palette of nearly 1,600 multi-colored bulbs forming a display on the south

side of the company's office building.

The upper seven floors of the building form a perfect seven-by-seven grid, with each of the 49 "cells" featuring red, green. vellow and blue lights. Overall, nearly 196 light strings and bulbs present musical/ light effects with almost infinite combinations Oxy sava.

Unilever Bid Okay

Chesebrough-Pond's Incorporated has agreed to be acquired by Unilever NV, a diversified producer of consumer products and chemicals based both in England and the Netherlands.

With a price of \$42.50 per share, or a total of \$3.2 billion, Unilever outbid American Brands, Inc., which had offered \$66 per share, or \$2.8 billion. An offer by American Brands to raise its bid to \$69 per share fell short of the mark.

Under the merger agreement, Unilever commenced a tender offer last week, through a US subsidiary, for all outstanding Chesebrough shares. The offer expires on Decem-

A spokesman for Unilever said that the company has under consideration the disposition of a significant part of the chemical products group of Chesebrough-Pond's, made up of the former Stauffer Chemical Com-

The chemical products group produces a variety of industrial and specialty chemicals, including products based on biotechnology. and contributes about 45 percent of Chesebrough's sales and 40 percent of operating profit. Chesebrough acquired Stauffer in March 1985 at a cost of \$1.25 billion in cash.

Kemira, Gechem Ink Nitrogen Pact

Kemira Oy has reached a preliminary agreement with Gechem, the chemical industries group of Societe General de Belgique, whereby the Finnish company would purchase Gechem's nitrogen and fertilizer assets. The agreement is subject to approval by the boards of directors of both companies.

Gechem has production plants at Marly, Willebroek, Tertre and Basecles as well as its marketing and fertilizer affiliated companies in Belgium. The company also has a 50 percent share in Seco SA, an NPK producing company in Ribecourt, France, and a joint venture ammonia plant at Geleen in the Netherlands.

Products include ammonia, nitric acid, calcium-ammonium and ammonium nitrates, nitrogen solutions, urea and NPK fertilizers as well as other industrial products. Annual sales volume totals 1.5 million to 2

Monsanto on Target With Isocyanurates

Monsanto Chemical Company has completed an expansion project at its Sauget, Ill. plant to increase capacity for trichloroiso-cyanuric acid ("ACL 90 Plus") to 44 million

pounds annually. The next phase of the company's expansion program for isocyanurates is already underway at its Luling, La. site, where dichloroisocyanurate capacity will be increased to 30 million pounds annually in late 1987. The company's dichloroisocyanurates are sold

BP Buys Seed Firm

BP Nutrition Inc., US subsidiary of BP Numarketers of "Super Crost" seed corn. BP says the acquisition provides the company an entry into the US seed corn market "and a vehicle for BP Nutrition to earn returns on sites in the US and abroad, while Fluor has its developing investment in biotechnology. also built a number of plants.



Dr. Irving Shain, chancellor of the University of Wisconsin-Madison, who will join Olin Corporation as a corporate vice-president and chief scientist, on January 1, 1987. He has served as a director since 1982 and will continue to do so.

ITC Count Final On '85 Chemicals

International Trade Commission, in a final report released last week, says combined US production of all synthetic organic chemicals and primary products from petroleum and natural gas amounted to 329,256 million pounds last year, or 2.6 percent less than the output in 1984.

Sales of these materials in 1985, which totaled 172,120 million pounds, valued at \$63,837 million, were 3.3 percent less than 1984 in terms of quantity and 2.5 percent less in terms of value.

The report, the sixty-ninth in an annual series, covers about 6,000 individual chemicals and chemical products and is prepared from data supplied by approximately 752 primary manufacturers. Copies of the report, Synthetic Organic Chemicals, United States Production and Sales, 1985, may be purchased from the Superintendent of Documents, US Government Printing Office, Washington, D.C. 20402.

Great Lakes Buys **Pentech Corporation**

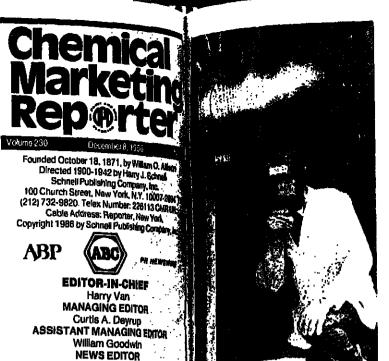
Great Lakes Chemical Corporation has agreed in principle to acquire Pentech Corporation and its wholly-owned operating sub-sidiary, QO Chemicals Inc., a producer and marketer of furfural-based specialty chemi-

Terms of the purchase include a \$110 million cash payment plus future considerations tied to performance. The acquisition is expected to be completed by the end of the year.

"The current specialty chemical line of QO fits well into several of the markets already served by Great Lakes," Emerson Kampen, president of Great Lakes, said Friday (December 5). "We anticipate that a whole new line of furfural-based specialty chemicals will be introduced in the very near future."

QO has annual sales of approximately \$130 million, over half of which are generated

Consumers Power Company has asked Dow Chemical Company and Fluor Daniel of Chicago to submit bids to convert the utility's idled nuclear plant in Midland, Mich., into a trition Limited of the UK, has acquired Ed-ward J. Funk & Sons Inc., Kentland, Ind., Power, Dow and other as yet unnamed partnatural gas, combined-cycle cogeneration



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HOUSTON (713/880.4988) Approperoate) plant in Midland, Mich., han the facility's original capacity of imilion pounds. The additional capacis expected to become fully opera-∴lby January 1987.

बिहे. Oreffice, Dow's president and chief fraire officer, says further expansions (sheduled next year. "By mid-1977, we Thre some 80 million to 100 million ்க்ள் capacity," Mr. Oreffice says.

As started development of the product ल jears ago, and as of this year, it is Paling in the black, Mr. Oreffice says, That's the shortest period of time erer seen for a new product."

By introduced "Drytech" absorbents in It for use in disposable personal-care Acts such as infant diapers, adult incondevices and external feminine hygiene with the capability to absorb and Pan even under pressure, 40 to 50 times weight in body fluids, "Drytech" Meats represent a significant advantage a traditional absorbent materials. Dow

Driech" absorbents have been on a "fast Track absorbents have been on a land brat at bow, moving from concept to full standard lization in less than three years. Recompany credits the rapid development, large part, to its close working relationwith customers and Dow's expertise in the city of the

Sues Abbott ^{Wer Diagnostic} Test

bbilech Inc., a subsidiary of Eli Lilly & Fishabbott Laboratories in Federal court is idle now and will not ageles, claiming that the sale of cerimmunodiagnostic tests by Abbott inproducts use a patented method em-

monoclonal antibodies to detect and a conditions such as pregnancy, can-

hititech is seeking damages and prelimity and permanent injunctions to prevent infunctions to prevent sealousement of the patent. Abbott's ounsel was quoted last week as saythe company will fight the patent in-

EPA Charges Du Pont EPA Wants And Petroleum Firms In Leaded Gas Scheme

Environmental Protection Agency denied any wrongdoing. "We strongly deave it is seeking more than \$40 million plore these accusations and intimations by says it is seeking more than \$40 million in penalties from four corporations, including \$9.5 million from E.I. du Pont de Nemours & Co., for alleged involvement company's specialty chemicals division. "We have always compiled with all lead phase-Nemours & Co., for alleged involvement in an illegal leaded gasoline operation.

The government charges in separate citations that the four firms produced leaded gasoline at a Cartaret, N.J. facility from 1982 through 1985 that greatly exceeded Federal standards on the amount of lead allowed in

Named in the citation are Du Pont as a lead additive manufacturer; Will Petroleum, Inc., a flouston, Tex., petroleum import business; Triad Petroleum, Inc., a New York petroleum broker; and A. Tarricone, Inc. ATI), a New York petroleum marketing

Together, the four companies are responsible, EPA claims, for one of the largest single leaded-gasoline blending operations in the US. During the three-year period, according to agency figures, they produced over 800 million gallons of leaded gasoline. EPA calculates the amount of lead ex-

ceeded the legal limits by more than 2 billion grains. The total amount of lead used in leaded fuel nationwide from 1983 through

1985 was approximately 126 billion grams. Spokesmen for Du Pont strongly denounced the government's allegations and

protective ozone layer, could be reduced

by one-third in the US and worldwide by

using "safe" CFC's, banning aerosols, and

recycling CFC's, according to a new

"A commitment to short-term reduc-

tions of one-third should promote the de-

velopment of substitutes so that over the

longer term — perhaps a decade — CFC's

can be phased out with the least economic

disruption," says WRI, a Washington-

To encourage the development of safe

and inexpensive substitutes for CFC's the

report recommends the imposition of a \$5

per pound tax on the widely-used chemi-

"Without a stiff tax, chemical compa-

nies may be unwilling to invest in the pro-

World Resources Institute report.

based policy research center.

cals, raising their prices tenfold.

EPA," says Ned Jackson, director of the

Craig Skaggs, a Du Pont public affairs official, points out that refiners rather than lead additive suppliers are responsible for controlling and reporting the lead content in fuel. He says Du Pont strongly disagrees with EPA's contention that the company is a "re-

Mr. Skaggs says Du Pont sold lead additives to ATI and supplied the customary laboratory analysis and unloading services.

Lead is added to gasoline to increase its octane. Adding extra lead allows producers to use a less expensive blendstock which gives them an econome advantage over those complying with the law.

"Illegal blending of gasoline is one of the worst fuel violations that can be committed," says J. Craig Potter, EPA assistant administrator for air and radiation. "Increased amounts of lead in gasoline can cause serious air-quality problems, especially in congested

Noting that EPA has ordered reductions in lead levels in gasoline because of studies indicating lead causes a variety of mental and physical ailments in humans, Mr. Potter says Continued on Page 19

Innovation is to increase the price of

The report on strategies for protecting

the ozone layer describes the risks of

ozone depletion, identifies ways to reduce

or eliminate CFC emissions and proposes

national and international courses of ac-

Ozone, the earth's shield from harmful

ultraviolet radiation, is being depleted by

man-made chemicals. The most destruc-

tive are fully halogenated CFC's, used in

aerosols, refrigeration and air condition-

ing, rigid foam insulation, flexible uphol-

stery fourn, fire extinguishers, and clean-

banned most aerosol uses of CFC's in the

Although the US, Canada, and Sweden

Continued on Page 32

ing solvents, WRI says.

CFC's by taxation or regulation."

On Chemicals Environmental Protection Agency is proposing to restrict the land disposal in hazardous waste facilities of 12 classes of hazardous substances beginning next

The substances include liquid wastes containing cyanides, metals, polychlorinated biphenyls (PCB's), corrosive wastes, and both liquid and solid wastes containing halogenated organic compounds (HOC's).

Land Ban

However, due to a lack of national incineration capacity, the agency is also proposing to extend the date of compliance for up to two years for HOC's and liquid wastes containing

The substances were specifically targeted for land disposal restrictions by July 1987 in 1984 amendments to the Resource Conservation & Recovery Act (RCRA), the Federal hazardous waste management and disposal

RCRA SETS LIMITS

RCRA sets specific levels above which wastes containing these substances must be treated prior to any land disposal. In November, the agency restricted the land disposal without prior treatment of wastes containing dioxins and solvents, but also proposed a tworear compliance extension because of insuf ficient incineration capacity.

"EPA is proposing to keep out of the land more than 25 billion gallons of some of the most toxic, mobile and persistent chemicals and metals produced each year," says EPA administrator Lee M. Thomas.

"This action will reduce the need for land management for these types of hazardous wastes in the future and will substantially reduce threats to the public health and the environment posed by the substances," he

In addition to proposing to incorporate the levels set in the law for these 12 chemical classes into final regulations, the agency is proposing new treatment standards requiring incineration for HOC's and liquid wastes containing PCB's.

Approximately 25.4 billion gallons of the substances affected by the proposal are stored, treated or disposed of in land-disposal Continued on Page 52

FDA Okays **PVC Package** For Food Use

Food and Drug Administration has issued a revised proposed rule that is expected to greatly expand the use of polyvinyl chloride for food and beverage packaging.

The agency says the new rules could triple the amount of PVC packaging produced annually in the US, currently estimated at about 250 million pounds. PVC would be used for alcoholic beverages, milk, frozen vegetables and other food products.

Most plastic packaging currently used for foods is made from polyethylene terephthalate. But officials in the plastics industry say PVC is less permeable and could be a more efficient container because it keeps oxygen from entering the packages. PVC is also a less expensive form of packaging than glass

FDA earlier proposed rules that would have restricted the use of PVC for packaging food and beverages. But the agency withdrew the proposal, and instead has proposed specific limitations on the amount of vinyl chloride that may come in contact with the packaged product. Vinyl chlorida, a precursor of PVC, is a carcinogen.

Environmental Protection Agency has told FDA that the revised proposal is generally protective of health and the environ-

Continued on Page 15

Dow Asked to Bid commercially as "ACL" 56, 59 and 60. applications, bleaches and pool disinfectant On Cogeneration Unit

Alcoa Is Closing More Capacity As Part of a Restructuring Plan Aluminum Company of America will our domestic fabricating system," says

CFC Cap Urged

Global chlorof]uorocarbon (CFC) emis- duction of known, relatively inexpensive

sions suspected of destroying the earth's - chemical substitutes," it says. "The key to

tons of primary aluminum capacity at two locations in the US. The shutdowns are part of a plan begun by Alcoa a year ago to close 25 percent of its whollyowned smelting capacity as part of a restructuring.

The capacity to be closed involves 39,000 the filed a patent infringement suit at Alcoa, Tenn., near Knoxville. The capacity metric tons at Massena, N.Y. and 40,000 tons offs, Alcoa says.

The actions brings to 353,000 metric tons the amount of capacity closed under the restructuring plan. The plan, announced last December and for which Alcoa took an aftertax charge of \$138.8 million in the fourth quarter of 1985, brought the company's wholly-owned smelting capacity, which is located in the US and Surinam, to 1.1 million ara Falls, N.Y. tons. Currently, 88 percent of that capacity is

being operated, the company says. The closings are an important part of the plan "to bring refining and smelting capacity more nearly into balance with the needs of

permanently shut down 79,000 metric Charles W. Parry, chairman and chief execu-Commenting on the latest closing at

Massena, New York Power Authority chairman, Richard M. Flynn, said "both sides tried their hardest" to keep the line operating, "but the market conditions in the aluminum industry were just too difficult to overcome." This is the second line closed permanently

at Massena. In an announcement in September, Alcoa said it was closing 105,000 tons of capacity at Rockdale, Tex. and 39,000 tons at Massena (CMR, 9/22/86, pg. 5). The Massena plant receives nuclear power

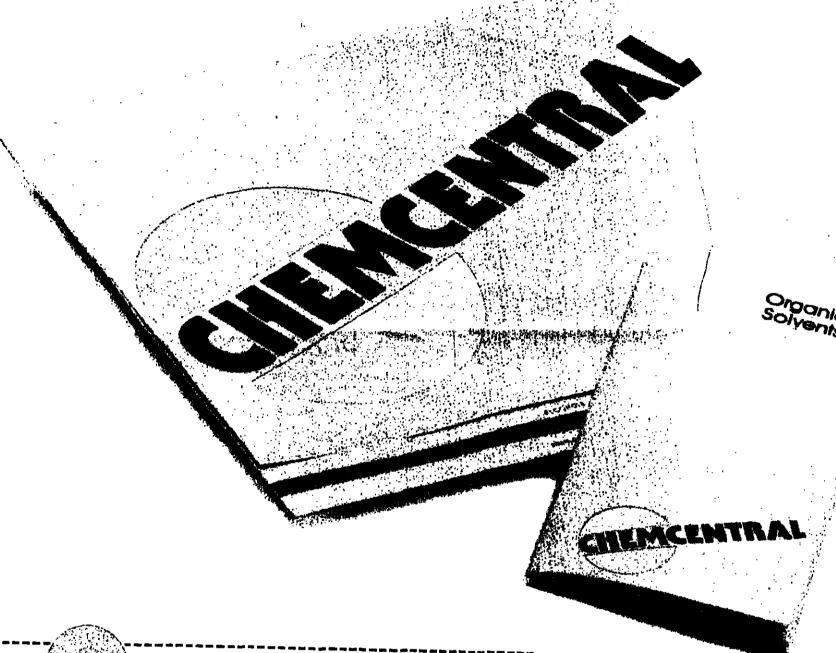
from the James A. Fitzpatrick project on Lake Ontarlo near Oswego. The plant is described by the power authority as its "next cheapest source" after the St. Lawrence-Franklin D. Roosevelt hydroelectric project at Massena and its hydro project near Niag-Mr. Flynn says Alcoa indicated it could

operate the potline only if it received power at the hydroelectric rate which, he adds, is "not feasible," since the authority has no ad-

Continued on Page 15

CHEMICAL MARKETING REPORTER

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MIDE ELECTS OFFICERS: The board of directors of Union Carbide Corporation has elected (Mailly English of the Sound and J. Clayton Stephenson vice-chairman. Mr. Kennedy wishis position as president and chief executive officer, and Mr. Stephenson continues as chief budsi and administrative officer. Mr. Kennedy succeeds Warren M. Anderson, who retired as himan of the board at the corporation's mandatory retirement age on November 30 after 41 years

Styrenics, Engineering Resin Get Top Priorities With Arco

Arm Chemical Company is reinforccommitments to polystyrenics and camering resins businesses with a sedissiplant expansions and introduction dimajor new product for the automo-

James Cobb, vice-president, polystyrenics Elegizering resins, says capacity for pro-ીતાંબના olystyrene-based resins has been েশগুরুর ১৫20 million pounds, the result of Erisof plant expansions

banded are debottlenecking of the com-कुंड Monaca, Pa., plant, producing "Dycopolymer, and expansion of the Arco-Sh Styrene Paper, (JSP) joint venture ity for production of polyolefin foam

is increase in polypropylene and thylene bead capacity, he notes, will be ्रिनिल्ले in 1987, a full year ahead of plan. mtling trade press editors at a meeting in Fork last week, Mr. Cobb said the 620opound total polystyrenics figure is "a number" for the company, but he de-idle give a further breakdown "because sio run our plants two or three different

La Arco executive also announced devel-Can of "Fibre-Cor" composite, the result jable effort by Arco Chemical and Sack-

ner Products, Inc., a leading supplier of auto-motive non-woven padding.

The thermoformable laminate, consisting of two outside layers of non-woven fibers with a middle layer of foamed "Dylark" resin, has many potential automotive applications, the most significant being headlin-

Jessie Jefferson, manager, engineering resins and automotive sales, revealed that the "Fibre-Cor" composite has been specified for headliners in several 1989-'90 model year cars and is an important element in development programs under way at major

Details of the new product will be unveiled at the Society of Automotive Engineers show in February, he says.

But the company is no stranger to the market for automotive interiors. Mr. Jefferson says that over 50 million cars produced in the ast ten years contained instrument panels and other interior parts molded of "Dylark" resin. Other Arco materials used include "Arloy" engineering resin for grilles, trim plates, and consoles, and "Dytherm" expandable copolymer for a variety of energy absorbing parts.

The latter. Mr. Jefferson points out, has become the material of choice for several new parts being incorporated in 1987 models

Bhopal Court Lifts Injunction On Carbide Restructuring

Carbide Corporation resumed the result of an act of sabotage by a disgrun-Acceptalization and asset divestment ticd Bhopal plant employee. Agam last week after the Bhopal disad court lifted its temporary injuncilagalist the restructuring scheme.

tovernment of India, which is suing to behalf of victims of the Bhopal Helah, sought to block the program, argu-rusi Carbide was putting the interests of addiors ahead of those of the Bhopal

latisfy any potential judgments debt is in the form of high-cost "junk" bonds.

bide's Bhopal pesticide plant two years million.

Carbinary

Carbinary

Carbinary

some enecute. The company. \$500 million for the company.

Carbido has said it will identify the former

employee at a later date.

Carbide said it was "pleased" last week that the court lifted the injunction, saying it "can now proceed with its business and follow through on its recapitalization program, which we believe benefits everyone concerned.'

As previously reported, the recapitalization program involves the first accumu-tion program involves the first accumu-tion program involves the first accumution program involves the repurchase by Movember 17 after Carbide proposed lated by the company to fight off GAF Corpolation in the company to fight of the compan

The injunction not only the sale of Carbide's that it would not be sale of Carbide's that it would not be sale of Carbide's that it would ask the court for at least agricultural chemicals business to Rhone-Alton from Carbide. According to the Poulenc of France and the sale of its Dandisarcsult of the estimate, 2,347 people Poulenc of France and the sale of bury. Conn., headquarters building. Sale of bury. Conn., headquarters building. Sale of bury. saresult of the poisonous gas leak from the two assets would raise more than \$900

Carbide also plans to offer around 25 mil-A statement last week, Carbide empha-libility offer to maintain a statement has been filed with the Securities with the statement has been then with the statement has been the statement had been the statement h ess lesk maintain the \$3 billion & Exchange Commission and raise another come effective. The sale could raise another

Dow Takes Long View Of Slow-Growth Mart

Annual industry growth in glycerine ers of natural material, largely Procter & demand is expected to average approximately 1.5 to 2 percent, keyed to GNP and improvements in major markets. Demand by producers of alkyd resins, cellophane and explosives is expected to decline, while growth in the drug, toothpaste, food and cosmetic industries will take up the slack. Few or no new end uses are foreseen.

That may well be the long-term scenario, but US producers are in a different ball game for this year at least. Dow Chemical Company, which is targetting the second quarter of 1987 as the completion date for a modernization program that will add 30 million pounds of capacity to its 110-million-pound Freeport, Tex. synthetic glycerine plant, thinks demand in the US will increase by 13 to l 7 percent this, year over 1985.

The company says consumption in the 980's has moved from a low of 220 million pounds to its present high of 330 million pounds. As a result demand is, for the moment, pressing on an industry capacity of some 380 million pounds and imports are well ahead of the 1985 level, while exports

For next year, Dow thinks imports should level off, but that it will be difficult for exports to regain their former strength as new soap and detergent production in third world countries provides the necessary glycerine.

With Dow as the sole remaining US procal Company and FMC Corporation dropped out of the business in the early 1980's — the balance of US supply has come from producthe second quarter of 1987

P&G has had sufficient confidence in the long-term future of the market to schedule a major increase in its refining capacity from the current 110 million pounds to almost 200



DOW GLYCERINE: Dow Chemical Compar

Silicones Get Nod

Silicone fluids, used in applications ranging from plastics processing aids to brake fluids, may soon take over the heattransfer market, a spokesman for Dow Corning Corporation said last week at a meeting in New York.

It's felt higher performance levels, low toxicity and longer life should enable silicone fluids to replace traditional organic liquids in heat-transfer applications, particularly high temperature and low temperature single fluid systems. The systems are used in solar energy and fuel cogeneration, as well as industrial cooling and heating applications.

While there are currently four other producers of silicone fluids in the US, inrluding General Electric Company and Union Carbide Corporation, Dow Corning lays claim to being the only maker of silicone heat-transfer fluids.

The company's "Syltherm" product

line developed, in the 1970's when the energy crisis forced industry to look at cheaper alternative energy sources, was based on a heat-transfer liquid called "Syltherm 444," an unmodified silicone fluid. An improved product, "Syltherm 800." a modified polymethyl siloxane, was introduced in 1978 and was first used in

With the Shenandoah project in 1981 the largest solar energy project in the US, Dow Corning began its first marketing push. In 1984, it set up a special 'Syltherm" technology and marketing service in Houston; this year, it has begun a full-scale marketing effort.

Dow Corning reports that over 100 installations have been set up since 1979, involving 60 companies in the polymer, Continued on Page 35

Nutrasweet Puts \$22 MM More Into Georgia Aspartame Unit

proprietary technology to improve aspartame manufacturing methods at its Augusta, Ga. plant. The \$22 million project will include equipment modifications as well as process improvements.

the company says. Robert B. Shapiro, chairman and chief executive officer, says the fact that the company is upgrading a facility that is only two years old "demonstrates our commitment to build upon our position of worldwide technology leadership and cost leadership in aspartame manufacturing."

The Augusta plant received approval for the project in late July and initial construction began in September. The new technology is being installed beginning this month and is scheduled to be completed by March 1987. The initial plant was completed in late 1984 at a cost of \$130 million and became fully operational in March 1985.

closely Food & Drug Administration's rejectivelopment.

Nutrasweet Company will install new tion of a petition by the Consumer Nutrition Institute, which sought a ban on aspartame for health reasons, and approval by the agency for use of the sweetener in four major new food and beverage categories.

Among new products which can be made available under the FDA approvals are rerigerated juices in ready-to-drink concentrated and frozen packages; ready-to-eat frozen desserts on a stick, such as fruit and dairy bars, frozen puddings and gelatins; and

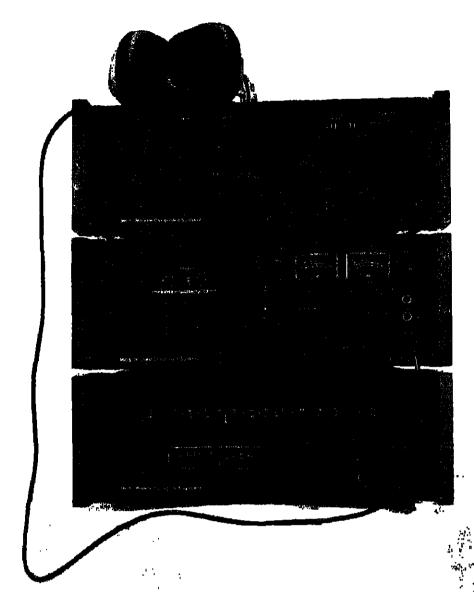
Coca Cola Company and Tropicana Products. Inc. asked for approvals of the uses in luices and desserts and Shaklee Corporation for the breath mints.

Sales of "Nutrasweet" brand aspartame sweetener were over \$700 million in 1985 and \$567 million in the first nine months of 1986. The company, a wholly-owned subsidiary of Monsanto Company, says it will spend about \$25 million this year on research and development focused on aspartame cost improve-Announcement of the project follows ments, new applications and new product de-

December 8, 1986 CHEMICAL MARKETING REPORTER

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December 8, 1986



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News Capsule

Sterling Buys Business

Serling Drug Inc. has acquired subspolially all of the prescription pharmalogical line of Schwartzhaupt GmbH of and Germany. More than 15 products anded in the acquisition will be sold in ts Germany by Winthrop GmbH, Steris marketing organization for preiolion and OTC products.

Sherex Chemical Expands

Sterex Chemical Company has exented its fatty amine capacity at Maplein the new process area will provide iborcent increase in nitriles, primary, and dimine capacities. Earlier this year, Party put 40 million pounds of surfactant appeity on stream at Janesville, Wisc.

Shell Unit Modernizing

Ward Blenkinsop & Co., Shell's fine denicals unit, is planning a \$42 million mdernization of its manufacturing facilnis in Cheshire, UK. Plans call for a new Enti-product processing unit, extensions amodifications to existing plant, a new Malory and infrastructure work.

Ri Sells Businesses

Killoldings Corporation, Chicago, has ফুলাঙ sell its personal products operais and cosmetic companies for \$1.15 limb cash plus a new issue of pre-And sock to new companies organized members of management and Drexel imbam Lambert Inc. The preferred dues have an aggregate liquidation

Miright Discloses Terms

Salright Company Inc. says it expects amplete its previously announced acislien of Packaging Industries Inc. by December. The company has agreed pro about \$23 million in cash for the domia-based manufacturer of flex-*plastic packaging for the food indus-

^{(Clinic}al Sciences Enters

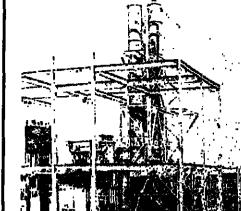
Choical Sciences Inc., Whippany, N.J., ां भी। market several diagnostic kits 1th \$70 million hepatitis B diagnostic site using patented technology of an Blomedica SpA, a subsidiary of Lift Flat Group. The arrangement is ist of a larger agreement involving a in commitment" of capital and techo Clinical Sciences by Flat, the

^{(co Unit} Expanding

too Solar Inc., a subsidiary of Atlantic field plans to expand its thin-film wasolar electric module manufacturlapacity to more than 1 million square Per year in 1987. The company cited in the module efficiency" as the is for the move.

Wins Contract

Sumprogetti SpA, a unit of ENI, has awarded a lump sum turnkey conit worth approximately \$140 million orign and construct the second South in Offshore complex. The complex double the gas production of the its located off Bombay, India, increasthe availability of natural gas for en-The and production of petrochemi-



BASF AT GEISMAR: BASF Corporation's new 'PolyTHF' plant under construction at Geismar, La., is slated to start up in the third quarter o 1987. The unit is part of a major expansion in acetylene chemicals at the site.

BASF Slates Specialty Unit For '87 Debut

BASF Corporation has started up an addition to its 1,4-butanediol plant at Geismar, La. and is targetting the third quarter of next year as the completion date for a new specialty unit now under construction at the site.

The 1.4-butanediol addition lifts BASF's capacity at Geismar to 155 million pounds. Acetylene for the facility comes from the neighboring Borden, Inc. chemical complex in which BASF has an equity interest.

When BASF AG completes the expansion of its 1,4-butanediol plant at Ludwigshafen, West Germany, in early 1987, the combined capacity of the BASF Group will total 400 million pounds.

Construction of a \$25 million polytetraincthylenc ether glycol ("PolyTHF") plant in Geismar is scheduled for completion in the third quarter of 1987. The unit consists of the new "PolyTHF" plant with capacity of 24 million pounds a year and tetrahydrofuran capacity which is being increased to 44 million pounds per vear.

BASF says the new unit will use a proprictary process that allows a high degree of flexibility in producing a wide range of prod-ucts to meet individual customer require-

The company primarily sells 650, 1,000 and 2,000 molecular weight grades of "Poly-THF" in bulk and drums, but says it is in a position to sell 250 other molecular weights

The unit completes the company's range of specialty diols/triols for the urethane and plastics industries. Additional products include 1,4-butanediol, 1,6-hexanediol, 1,5-pentanediol, neopentyl glycol, hydroxypivalic acid neopentyl glycol ester and tris-hydroxyethyl isocyanurate.

In addition to the investment in capacity expansion and product line extension, new computer controls are being installed.

Monsanto Expanding Alkylbenzene Unit

Monsanto Chemical Company says it will start construction within the next several months on a 50-million-pound expansion of the linear alkylbenzene production unit at the company's Chocolate Bayou plant in Alvin, Tex.

The expansion, approved by Monsanto's board of directors, will be in operation in late 1988 and will bring the unit's annual capacity to 300 million pounds.

Schering-Plough Aims For \$5 Per Share in '87

Earnings per share of Schering- only \$100 million as recently as 1981. Plough Corporation, the diversified producer of pharmaceuticals, biotechnology products and consumer products based in Kenilworth, N.J., should comfortably exceed \$5 per share in 1987, Robert P. Luciano, chairman and chief executive officer, told a meeting with security analysts at company headquarters last week.

With the acquisition of Key Pharmaceuticals, a leading producer of transdermal formulations, earlier this year, and the introduction of several new products, earnings will continue to increase substantially, Mr.

Luciano told the analysts.

A significant development in 1986, Schering-Plough's CEO noted, was the introduction of the company's first genetically derived product, "Intron A" (interferon alfa-2B). Also the company claims to have scored phenomenal success with its new diet-aid product, "Fibre Trim."

Stating that research and development is the "sine qua non for success in the pharmaceutical business," Mr. Luciano reported that the company this year has allocated \$210 million for that activity, as compared with

As previously reported, Schering-Plough's management affirmed confidence in the company's progress by proposing a two-forone split of the company's shares, and a dividend increase to \$2 per share (pre-split basis) beginning in May of next year.

Richard J. Kogan, president and chief op-erating officer, told the analysts that the company's growth rate in this quarter is significantly ahead of that of the third quarter, and sales for the full year will surpass \$2 billion for the first time.

Detailing success of individual products, Mr. Kogan noted that:

 The Key allergy product "Theo-Dur," now the company's largest selling offering should have full-year sales of more than \$100 million this year

 Strong 1986 sales gains are being chieved for flutamide, a treatment for prostatic cancer. Sales quadrupled in the first nine months from the same period a year ago and will approach \$15 million for the full

• In cardiovasculars, sales of "Normodyne" antihypertensive have more than doubled so far this year and should easily exceed

Continued on Page 27

Phosacid Charge Denied

Societe Chimique Prayon-Rupel SA and its United States sales agent, Nitron Chemical Corporation, have denied dumping and subsidy charges brought by FMC Corporation and Monsanto Company (CMR, 12/1/86, pg. 7) against the purified wet phosphoric acid Prayon and Nitron import and sell in the US.

The companies say they've told the International Trade Commission that their success in the US industrial phosphoric acid market is due to a patented and more efficient process for producing industrialgrade phosphoric acid that has a substantial cost advantage over the older, thermal production process still used by the US industry.

"Imports of Prayon's product, indeed industrial phosphoric acid imports in the aggregate, represent an insignificant part

phosphoric acid," the firms say in their statement to the commission.

"In comparison with other forces affeeting domestic producers, any effects of imports are negligible." They maintain that, in spile of stagment or decreasing demand for phosphoric acid and the end products of the acid manufactured by FMC and Monsanto, the US producers phosphoric acid operations have remained profitable, their sales have increased, and over the last several years, their prices have risen substantially.

Alain Flausch, deputy general manager of Prayon, says his company intends to defend itself "vigorously" against the charges and expects its position will be "vindicated."

PVC Makers Look for Growth As Environmental Fears Ebb

Producers of polyvinyl chloride are institute, siding and plumbing pipe applicawill continue to grow, as environmental fears, particularly in the plumbing, electrical conduit and food packaging areas, are allayed.

According to the Vinyl Institute, a trade association representing leading producers of the plastic, the market for US-produced PVC should grow by 9 percent this year, to 7.3 billion pounds (including exports).

Although they expect growth to slow down to around 3 percent next year as new tax legislation and changing interest rates impact construction, which accounts for over 60 percent of the total PVC market, the longrange projections for the market are optimistic.

Piping, draining and vent applications, which currently account for about 3 billion oounds of demand per year, should more than louble in the next three to five years, says Ray Gottesman, executive director of the institute, as designer's and builders' percep-

tion of the plastic change.
Similarly, demand for food-grade resin in packaging applications should reach almost 600 million pounds by 1988, he says.

In a recent survey of 550 architects, builders and code officials throughout the country, most professionals praise the durability of the material and say they plan to use more of it in the future, particularly in electrical conduit applications.

According to the study, sponsored by the JICHENICALMARKETHIS REPORTER (Décember 8, 1986

confident that the market for this plastic tions currently have the highest recognition levels among building professionals.

Lower recognition levels were found for window, flooring and gutter uses. According to Mr. Gottesman, this represents a chal lenge to the industry to communicate the benefits of vinyl products more broadly.

Controversy has surrounded the use of PVC in electrical wire and cable and plumbing pipes since 1982, when the first Fire Toxicity Conference issued data on PVC's toxicity in fire situations.

This same year, a study conducted by James Montgomery consulting engineers in California showed that PVC plumbing pipe leached harmful chemicals into drinking wa-

Not surprisingly, the Vinyl Institute was founded that year, to modify what producers feared were developing misconceptions about the plastic.

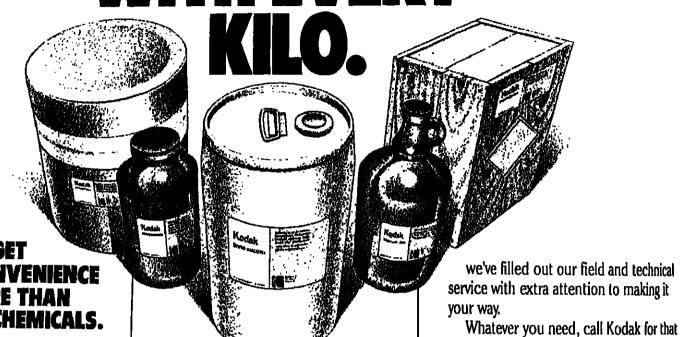
Despite the fact that PVC has been fully approved by EPA and NSF for use in plumbing and wiring applications, and that the three national model building codes universally approve its use in piping and electrical conduit, there has been a movement to block its use in plumbing pipe in California, where union plumbers filed a suit restricting its use in 1979. In 1982, they were granted a court

order halting new approvals of PVC pipe.

Makers of vinyl have long hoped that the plastic would fully replace metal in water

/ Continued on Page 33

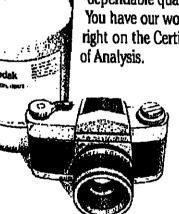
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OILS, FATS & WAXES

Soybean Oil Trends Higher, But Basic Support Is Lacking

market players expect to see the satial back down before the year is d Expressing the feeling that the price utilically high without the necessary extet conditions in place to support it. nks believe that large supplies and s demand levels will deflate current

Recurrent seemingly strong pricing is mixed partly to an anticipation of buying in light in the next month. Mostly, though, idescite the fact that oil stocks have not ha built up to the degree that had been

Readily rising crush rates throughout the n that October led many traders to believe લાનો supplies would rise to levels greater ம்வளைd could accomodate, resulting in teressed pricing. Apparently, though, lary domestic buying in October and Samber was sufficient to prevent predic-End very heavy stocks from panning out. Sill supply is said to be more than suffi-ह्मा to meet demand, and traders believe tablefact, coupled with the lack of buying Liest being felt in the market lately, will withweaker pricing before the end of the

Curent demand levels are said to be very bully both domestic and foreign markets. Whiten US government-supported sales, :(Ssoybean oil is being exported, sources

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uterise, domestic buyers have been very Elivefor the past couple of weeks, accord-The industry sources. "We're still seeing Ements from older sales going out, but sees no new business coming in," says a

Palign demand that is usually seen a thorso before the holiday season has isubsided, leaving many buyers with moil than they need. "There was a lot of through back in October, especially on the oil, "says a source, who sees this as a nateson for the present lack of buying. Remarket is in for a slow period for the next acthor so, be says.

bistry observers differ on the present idially future condition of meal demand essystean crush rates. Some market playand a specific to see crushers taking taking taking taking later this month. They say that the orders will be unwilling to run at high levishing to fine the decreasing margins that are

FRIDAY SPOT PRICES MARKET CLOSE DEC. 5, 1986

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thenrice of soybean oil has been mov- Others, however, believe that demand will Lippwards during the past few weeks, be strong, and that consumer activity will keep the crushers busy. Meal demand for feed generally increases in early Winter, says a source, making it unlikely that crush ers will be in a position to case off on produc tion. If they respond to the expected strong demand, oil availability will grow, stocks

will continue to build, and prices will have

difficulty maintaining much strength.

VEGETABLE OILS

CORN OIL - Availability of this oil is remaining tight, helping the price to maintain its current strength. "It's very difficult to find anything for quick shipment," says a

PRICES TRENDLINES

WEEK ENDING DEC. 5, 1986

CHANGES/UP

Coconut oil, NY, %c. per lb.
Corn oil, Midwest, 1%c. per lb.
Cottonseed, 41% bulk, Memphis, \$20 per ton
Cottonseed oil, Valley, ½c. per lb.
Linseed, extracted, 34% bulk, Minneapolis,

Peanut, 50% bulk, SE, \$25 per ton Soybean, 44% bulk, Decatur, \$12.20 per ton Soybean oil, Decatur, .44c. per lb.

CHANGES/DOWN Palm oil, NY, .875c. per lb.

OILS, FATS INDEX

The Oils, Fats & Waxes index reflects the prices of 11 representative materials in this sector and the quantity of each produced in 1985. 85.83 Dec. 5, 1986 .

80.75 Nov. 28, 1986 Nov. 7. 1986 82.74 Dec. 6, 1985 86.11

Chemical Prices Start on Page 36

source, who notes that a buyer wanting nearby oil would have to wait for a thirty day

Trading has been very light in the corn oil market, sources say, calling this period the "holiday doldrums." Most of the buying that is going on is said to be hand to mouth, with very few forward purchases being made.

Despite the lack of oil for immediate shipment, there is said to be some lessening in the supply crunch. Low levels of buying, are allowing "some catching up" in the market, sources say. Strong demand a few weeks ago had corn oil almost impossible to find. Refiners are still running at or above normal levels, even as buyers are staying away from the oil. At this point, although material remains light, there is some improvement being seen

In the situation.
SUNFLOWERSEED OIL — The price of this oil has fallen about one cent, to currently quoted levels of 14 1/2 c. to 15c. per pound for crude oil, f.o.b. Minneapolis. The drop is attributed to lack of buying interest and lower levels on the Chicago Board.

Previousiy Crushers had been buying seed "aggressively," says a source, and some tightness in availability of seed resulted. Now, however, this pressure has eased off, and the price has come with it. Ample supplies are expected to keep prices weak.

Sun oil producers had been hoping to see some business from Mexico, but so far that has not materialized. In fact, Mexico recently bought a cargo of the oil from Argentina, according to an industry source, casting some doubt on the likelihood of orders to the US in the near future.

FATS & GREASES

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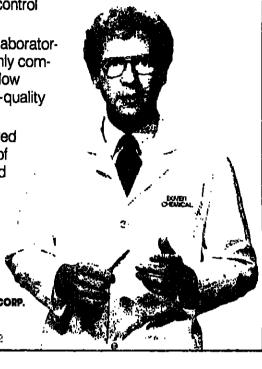
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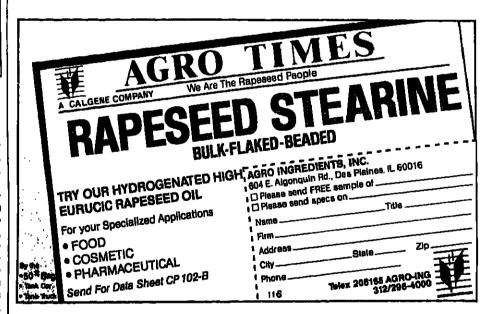
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Institute, said he was "astounded" that imbank chose to violate a congress: reauthorization measure which is barely

by US exporters is said to be contributing to the strong position of the market. Exporters who oversold several months ago, based on

high production levels at the time, have been

coming into the market to cover these sales lately in a period of slack production, accord-

Consequently, consumers coming into the market are finding firmer prices. The result

of this activity has been snug supplies and strong pricing. Helping the market to main-tain its firmness is good, steady export busi-

ness for the past few weeks. This, plus steady domestic interest, is keeping spot material

hard to come by, while forward positions are more readily available, sources say.

TALL OIL FATTY ACIDS — Production

of tall oil fatty acids (TOFA) was up in Octo-

ber compared to September, according to figures made available by the Pulp Chemi-

ing to an industry source.

FATTY ACIDS

Eximbank announced that it would be \$20 million credit request from USexpo seeking to provide two walking draging the Jordan Phosphate Mining Co. Mr. Myers says the approval should been impossible because Congress

Fertilizer Group

Criticizes Loan

month barred the use of all Eximpant to establish or expand production of a nation's export commodities if such ucts are in world surplus, if they con directly with similar US products, or it assistance would cause substantial inju US producers.

"In the case of phosphates, we have beyond all doubt that all three situalic ply," Mr. Myers says. "If Ex-Im can app this request, it can approve anything

Although Eximbank admits that phate is in surplus and that the Jord expansion will cause a drop in US expansion argues that the benefit to the dragline try from Eximbank's support of the would "outweigh substantially the pole

injury to US phosphate producers.

Mr. Myers says he will alert congress leaders that Eximbank has ignored thes of the new reauthorization guidelines.

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cals Association. Production of two personal more rosin content TOFA was 17,761, pounds in October, up 11.9 percent from the previous tember's figure. For TOFA containing to than two percent rosin, output hit 21,871m and pounds, up 33.7 percent from the previous pounds.

TOFA producers have been enjoying some improvement in the economics of the mark since crude tall oil (CTO) prices fell at beginning of this quarter. The drop in prices fell at the mark for TOFA producers. However, the mark continues to be troubled by overproducits relative to demand. "The world marks for the world worl

relative to demand. "The world marks to fatty acids is at a low level." says a some week by supply outages and heavy worsening the already burdensome overstand the demand has sparked a mid-Most market players are finding the prices are being discontinued off listed in stry sources say that hydrodealkylacis, as producers try to come of listed in the stry sources. els, as producers try to compete with the production has been turned on to acids from other sources. There is sometic. met the market's needs.

cation that prices have bottomed on an a Bearene is a pretty hot item," says a that they may begin to ease back up index. While "most cargoes have been spoing months, according to industry source. I be for already," he observes, "people are

The spot market is quoted at 98 cents per glon, a substantial increase from the pre-ion week's 93-cents-per-gallon level. The polyrice one month ago was 85 cents per

Shell Chemical Company reportedly nixidiscontract price 6 cents per gallon for Last week's action by the US Export Doember 15 by removing a portion of its Import Bank to approve a Jordania known voluntary allowance. The effective provided increases to 98 cents per gallon phosphate industry loan makes a "mother by rice increases to 98 cents per gallon ery" of the US Congress and is indicain; from the producers, most of whom have been governing its existence, according to be at the fortilizer industry. spokesman for the fertilizer industry and Oil Company's contract posting Garv D. Myers, president of the Fertile and December 1 has been 95 cents per gal-

PRODUCTION DISRUPTIONS

b their notification to customers of the pin increase, Shell reportedly said that it बन्धेक्टर्ब a serious disruption of produc-batis 150-million-gallon-per-year Deer fat, Tex. facility around the end of Novem-जिञ्जलकार के अधिकार के अध Capishipments are believed to have been

bring this quarter, Exxon Chemical Atrices, Petro Canada Ltd., and Shell feets have also experienced unexpected ्रभूपीप्रधारांजाड In addition, production at Stan Oil's Alliance, La. plant is said to eleencut back recently due to a mechan-

rolicers say that strong derivatives departicularly for styrene production, intalributed to market tightness. Rising proprices are cited as a factor behind the Ene price movement, although styrene Picters say their prices have risen in re-

FIRM SINCE AUGUST

a way, both markets have been firm The latest spot benzene to the latest spot benzene to the latest spot benzene per gallon is 30 cents per Caligher than its mid-August bottoming-likel where it was driven by falling crude August down to 68 cents per gallon.
Augustianist have risen during this peroli cents per pound from 18 cents per

occassioluene pricing has been consider-ystader than benzene in recent months, high price spread between the two has

b 70 cents per gallon, putting it 28 to 29 cents per gallon, or 29 percent themene. One month ago, the spread themene one month ago, the spread themenes per gallon (24 percent), and themenes ago it was only 7 cents per

nest of the second half of the year, al hydrodealkylation (HDA) capacity toluene to benzene has been idle. torness of ham factor "contributing to And to three months," says one industry zene experienced in the and another comments that "with dacross all derivatives as strong as it that there is no doubt that HDA has Reded for some time, going back to the

recently, however, has the price ween benzene and toluene widened Abactive enough breadth for hydeal-

estimate that major hydealers de to foresee one-and-one-half to three months of profitable production before starting up a unit. This is said to be the case even though HDA units are "among the most forgiving" in the industry, and "can be turned on and off like a light bulb."

One major hydealer says the current market conditions "will turn on even marginal hydealers." Because of the industry's production problems and strong demand, HDA activity "will approach the shortfall," but

PRICES TRENDLINES

WEEK ENDING DEC. 5, 1986

CHANGES/UP

CHANGES/DOWN

AROMATICS INDEX

The Aromatic Organics index reflects the prices of 14 representative materials in this sector and the quantity of each produced in 1985.

C.	5, 1986	167.84
v.	28, 1986	167.84
V.	7, 1986	167.84
C.	6, 1985	167.84

Chemical Prices Start on Page 36

should not have a dramatic impact on bezene pricing, he says.

An industry analyst expects benzene pricing to move slightly higher, then stabilize, and then fall back slightly in the coming weeks as the additional production is felt in the market.

A trader says that the startup of HDA units sometimes can depress the market price on benzene, or at least keep a lid on it, but I think this time it will not be more than the market

One hydealer says he is most concerned with obtaining enough toluene to operate the unit because "copious amounts" of material are moving into the gasoline pool, even though octane demand is declining season-

An analyst observes that "not too much toluene is extracted and available anymore," but is being kept in the gasoline pool, and a trader partially attributes thinness in the toluene market to this factor.

OXYNAPHTHOIC ACID - American Hoechst Corporation says it will raise the price of b-hydroxy naphthoic acid (b-oxynaphtholc acid) by 25c. per pound, effective January 1.

The price for contract and truckload quantitles moves to \$2.50 per pound from \$2.25 per pound, and the price for less than truckload quantities moves to \$2.60 per pound

from \$2.35 per pound. Prices are f.o.b. ware-house or US shipping point, duty paid. The company says the weakening of the US dollar in relation to the Deutschemark is a cause for the price change on this product which is said to be used primarily in pigment manufacturing.

PHENOL - Producers have announced USA will raise its list pricing by 5c. per pound, to 32c. per pound from 27c. per pound. Dow's selling prices will move up 5c. per pound less a 2c.-per-pound temporary competitive allowance.

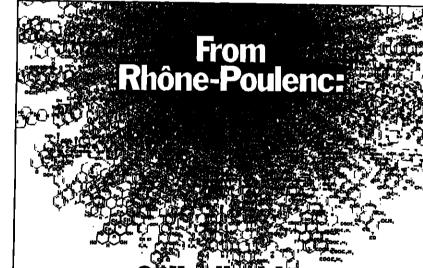
BTL Specialty Resins Corporation will increase its selling prices by 4c, per-pound less a 2c.-per-pound temporary voluntary allowance.

USS Chemicals will raise its selling price by 5c. per pound less a 2c.-per-pound TVA. Producers attribute the price movement principally to higher feedstock benzene

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AROMATICS

costs. Other producers are believed to be

moving in kind.

STYRENE — A number of styrene producers are posting a 26c. per pound price this month. Included are: Borg-Warner Corporation, Dow Chemical USA, Fina Oil & Chemical Co., and Sterling Chemicals. Fina's price involves a 4c.-per-pound temporary voluntary allowance (TVA) off a 30c.-per-pound

announced a 25c.-per-pound price, and Huntsman Chemical Corporation says its

the others "clouds the picture," according a rival. However, Huntsman cites the comp tition's policy of discounting substantially. higher postings.

Producers report meeting competitive attended by the conditions in November down to a power at the bydro rate "would have jeopar-pound."

Comment to competitive attended by the competitive attended

listing.

Arco Chemical Co. and Chevron Corporation have each posted a price of 27c. per pound. However, Amoco Chemicals Co. has

Supply-wise, according to a produce Huntsman Chemical Corporation says its price is 25c. per pound less a 2c.-per-pound away" because of numerous turnaround scheduled for the early part of next year. Also, it is said that there is a seasonal need to Northern terminals and as Huntsman's posture in recent months of send product to Northern terminals and costating a price 1c. per pound or more below suming locations prior to the winter freeze

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A bright spot, Mr. Flynn notes, is that the largest Alcoa potline at the site will continue to operate with St. Lawrence-FDR hydropower. Use of the power saves the company about \$65 million, the authority claims. Alcoa receives 174,000 kilowatts of firm hydro power and 65,000 kilowatts of interruptible

power.
The aluminum company contracted in 1981 for a long-term hydropower supply for the Massena plant to run through 2013 if the power authority's Federal license for the St. Lawrence-FDR project is renewed in 2003.

OBITUARY

Sidney Gross

Sidney Gross, a longtime public relations specialist in the chemical process industries, died November 26 of lung cancer in New York. He was 63 years old.

Mr. Gross formed Gross & Associates, New York, a PR firm, in 1971. Its main CPI client: Phillips Petroleum Company. He sold out his business to employees in 1983, and joined New York University's Department of Journalism and Mass Communications. He moved up to become chairman of the depart-ment, and, at the time of his death, he had been retired from NYU.

Mr. Gross earned bachelor's and law degrees from Ohio State University. He worked as a reporter and editor for the Cleveland Press and the Cleveland bureau of the Associated Press before moving to New York.

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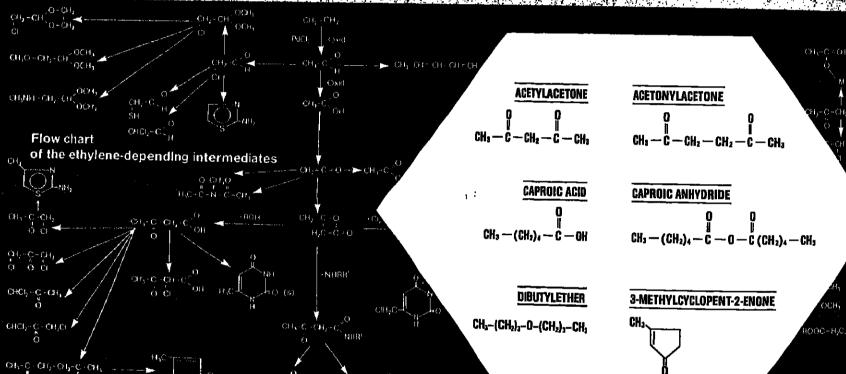
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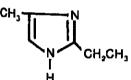
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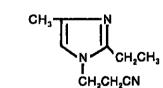
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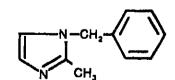
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Chemical Finance

Henley Plans Stock Repurchase

announced its intention to sell this stock.

Henley Group Inc. says it plans to repurchase up to 10 million shares of its common stock on the open market or in negotiated transactions. The company has approximately transactions and componshare equivalents outstanding. nately 129 million common shares and common-share equivalents outstanding.

"We believe that Henley stock is substantially undervalued and does not adequate reflect the asset enhancement and improved operating results achieved during our fine and annually over an unspecisix months as a public company," Michael D. Dingman, chairman and chief executive

Henley's book value per share on September 30 was \$30.24. The stock closed at \$23.8 last Thursday afternoon (December 4), before the stock repurchase program was an

Henley holds \$7 billion of consolidated and unconsolidated assets, with \$3.8 billion of shareholders' equity, \$1.1 billion of cash and equivalents and \$122 million of debt. Henley says the buyback program is independent of the posible purchase of the 193 million shares of convertible preferred stock held by Allied-Signal Inc., which previous

Diamond Shamrock Deal Sought by Mesa

Diamond Shamrock Corporation, Dallas, Tex., has been informed that a partnership including T. Boone Pickens, chairman of Mesa Petroleum Corporation, plans to file documents with Securities & Exchange Commission covering a tender offer for 1 | The modernization, while not a process percent of Diamond Shamrock's shares in exchange for units in Mesa Limited Pariner ship. This would be followed by a merger.

Diamond Shamrock's management will review the offer with outside legal and investment banking advisers and then decide on what to recommend to the company's share-

Montefibre SpA Makes Early Dividend Payment

Based on strong ten-months results and a favorable outlook, Montelibre SpA, the synthetic fibers subsidiary of Montedison SpA, of Italy, will make an early partial it musting to 5 cents per pound. The decrease payment of 40 lire on the 1986 dividend for every common share and savings share of the installation to high import levels and to company, effective December 16.

For the ten months ended October 31, Montefibre had net profits of \$22.07 million(\$9)

Montedison also announced that in London, Credit Suisse First Boston has put logeller a consortium of credit institutions for a secondary offering of Montefibre's ordinary and savings shares in international markets.

Dexter Corp. To Acquire Rutland Plastics

Dexter Corporation, Windsor Locks, Conn.-based producer of specialty chemicals and materials, has agreed in principle to acquire for cash Rutland Plastics Incorporated. Charlotte, N.C., before the end of the year.

Rutland is a privately held, specialty formulator of polyvinyl chloride compounds plastisols (specially formulated PVC dispersions). Compounded products include flexible and rigid PVC for specialty molding applications and yarn coatings. The company is said to be a leader in the field of plastisol screen-printing inks for textiles, and plastisols to industrial applications. Annual sales total \$20 million.

The acquisition is subject to various conditions, including negotiation of a definition agreement and approval by directors of both companies.

American Hoechst Extends Tender Offer Date

American Heochst Corporation, Somerville, N.J., has extended through December the expiration date of the tender offer by the company's wholly owned subsidiar, Hostachem Corporation, for all of Celanese Corporation's outstanding shares of common

stock, convertible preference stock and 7 percent second preferred stock. American Hoechst said that the company is still in the process of supplying certain additional information requested by the Federal Trade Commission pursuant to the Hart-Spott Boding Author Commission pursuant to the Hart-Scott-Rodino Antitrust Improvements Act.

Olin Acquires Continental Water Systems

Olin Corporation, Stamford, Conn., has acquired all the outstanding stock of Continent tal Water Systems Corporation, San Antonio, Tex. Olin has had an equity interest in this high-purity water company since February 1985. Continental will become part of Olin's Water Products & Services Division.

Alcan Selling Interest in Haley Industries

Alcan Aluminium, Ltd., Montreal, Canada, has filed a notice with the Onlario Secarities Commission and the Toronto Stock Exchange that the company intends to sell their 20.5 percent interest, or 1,065,900 shares, in Haley Industries Limited through the Toronto Stock Exchange Toronto Stock Exchange. Haley manufactures specialty castings for the interest aerospace industry. Alcan said it will deploy proceeds of the sale in other new hours

Financial Briefs

Phelps Dodge Corporation's board of directors has declared a dividend of \$1.25 pc. share on the \$5 convertible exchangeable preference shares for the period November through January 31 powerla February 21 p through January 31, payable February 1 to holders on January 15... Hercules Across Company 2 substitute and Microsoft my, a subsidiary of Hercules Incorporated, will acquire the Support System operation of Unisys Corporation for \$42 million in cash... Aluminary of Canada (Alcan) will redeem on December 29 all of its outstanding percentage of the control of the c sinking fund debentures due March 1, 1995... Bio-Response, Inc., Hayward, Calif., and Ventrex Laboratories Inc., Portland, Maine, have agreed to cooperate in monoclosed antibodies for use in the fields of allergy, endocrinology, infectious disease and cancer-swedley in the fields of allergy, endocrinology, infectious disease and cancer-swedley infectious disease and cance Mich., have formed a new corporation, SDC Coatings Inc., to use abrasion coating technology of the coating technology of the coating technology. coating technology developed by the parent companies for automotive, aerospace at other applications... USX Corporation and Aristech Chemical Corporation addless that the public offering of 25,875,000 shares of Aristech common stock has been closed Aristech was formerly the description. Aristech was formerly the chemical division of USX... Amax Incorporated his completed the previously approved at the chemical division of USX... Amax Incorporated his completed the previously approved at the chemical division of USX... pleted the previously announced sale of its wholly-owned subsidiary. Amax Chemic Corporation, to FCS Energy, Inc. of Leesburg, Fla.

ALIPHATIC ORGANICS

aperiod of time.

a production of natural glycerine is limad by the demand for primary products this soaps, fatty acids and fatty alcohols. Islypically produced in a ratio of 1 pound decrine for every 9 pounds of prime

Fille admitting that this year's growth is mothing of an anomaly and that the future alook is for a GNP-type increase in de-امر Dow says its modernization program part of a long-term commitment to "onproduction of glycerine for the US

dange, includes the debottlenecking for 30 mlion pounds of additional capacity, as well implementation of new equipment and name which will enable the company to gwice a minimum of 99.7 percent purity gwine. Currently, the company makes Hand 98 percent pure product.

Despite the strong market, glycerine proturn recently announced price cuts wante domestic natural glycerine inven-

Mileinventories are currently high, Dow Multimrecent years the glycerine indusin businessed several short supply petiva. The company feels its "on-purpose" inches process, in conjunction with the Gardy expansion, should assure its custons constant availability during any fu-

MNES – Virginia Chemicals has ancad it is increasing off-list prices for shexylamine and n-octylamine, effeclannary 1, 1987.

hylhexylamine is being raised 4c. per dand n-octylamine is increasing by 6c. append Both increases are attributed to ेत raw material costs. Shipments are Portsmouth, Va.

addition, raw material costs for some ta amines have increased. Mild transient ages have been experienced in some

Arts, the company says.

CIPROLACTAM — The other two US Polaciam producers have followed is itead in advancing prices on January 1 ^{IR} 12/1/86, pg. 19).

Med-Signal Inc., which produces in Reli Va., is meeting Nipro's increase of it per pound, while BASF Corporation is Right Sc. per pound and increasing its age about 3 percent.

Spice accordingly, to 92c. per pound f.o.b.

For instance, the

Freeport, Tex. All prices are for standard molten-grade material, f.o.b. production

Producers attribute the increase to a number of factors. Output of caprolactam this year is expected to approach rated capacity

PRICES TRENDLINES

WEEK ENDING DEC. 5, 1986 CHANGES/UP

CHANGES/DOWN

ALIPHATICS INDEX

The Aliphatic Organics Index reflects the prices of 20 representative materials in this sector and the quantity of each

Dec. 5, 1986		222.8
Nov. 28, 1986	·	222.8
Nov. 7, 1986		222.8
Dec. 6, 1985		222.8

Chemical Prices Start on Page 36

for the industry, and supplies are considered

Producers also note that prices for byproduct ammonium sulfate. a fertilizer material, have been depressed because of weakness in the fertilizer market.

In addition, raw material benzene prices for all producers have gone up over 10c. per gallon over the past few weeks. Although Allied uses phenol as a raw material while the other two employ cyclohexane, both are benzene derivatives.

Market participants peg current selling prices between 62c. and 70c. per pound, f.o.b. plant, depending on contract size.

CHLOROACETIC ACID - American Hoechst Corporation has announced it will increase the price of its monochloroacetic acid solution, effective January 1, 1987.

The new price will be 52c. per pound, delivered, up 2c. per pound. Material is shipped as an 80 percent aqueous solution, but is priced on a 100 percent basis. The increase is primarily due to higher costs in manufacturing, environmental safety, and shipping, the com-

SURFACTANTS — American Cyanamid Company has announced price increases of 2c. to 4c. per pound on its line of "Aerosol" brand surface active agents. The increases arc effective December 15, 1986, and aver-

For instance, the price of "Aerosol OT-

ALPHATIC ORGANIC OUTPUT: 3RD QTR. 1986

USINTERNATIONAL TRADE COMMISSION NUMBERS IN 1,000 LBS.

151,765 170,848 611,817 2,284,820	Techiorosthene acatata recenomer, coloride monomer	448,498 480,803 1,722,031 6,374,672	458,448 1,553,350
366,730	erythition to the control of the con	447,852 87,570 805,399 11,577,059 1,148,019	412,954 98,009 347,110 9,678,404 1,455,689 401,636
317,888 1,862,169 97,332	engi Victioride Victioride	4,417,834 959,786 5,020,275 310,679 406,721	799,279 4,548,689 280,970 362,718
1,620,599	Ocarbons 11 and 12	4,441,639 428,581 414,796	4,302,676 386,345 371,672 4,307,171
8,351,049 24 1,187,033 3 85,193	ing glycol, mono ing glycol, monoethylether	24,466,013 3,506,540 229,874	22,827,389 3,390,306 220,101
162,888 120,498 140,992 51,210	Olamines (mono, di and tri) Scalate (85 percent)	323,630 418,985 147,613	421,687 182,487
250,295 657,690	fine (rubber granie)	1,887,595 862,783 2,026,733 516,976	1,706,072 643,793 1,872,822 533,286
1986 781,954 466,519	G Beld	1966 2,220,691 1,444,252	1985 2,149,836 1,356,069
		A WOULDS	8 (100)



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CHEMICAL MARKETING REPORTER December 8, 1986

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ethoxylates and ethoxysulfates from Shell Chemical.

ALIPHATICS

75%" will increase from 90c. per pound to 93c. per pound in truckload quantities, f.o.b. Willow Island, W. Va.

American Cyanamid says the new prices reflect higher manufacturing costs that include higher costs for the key alcohols used to produce the "Aerosol" surfactants, and increased costs related to environmental con-

The products are sulfosuccinate and sulfosuccinamate-type surfactants that utilize various alcohols and maleic anhydride as key building blocks. American Cyanamid says thay are used in a wide range of products and processes, including latices, textiles, pesticides and cleaners, because of their wetting and emulsifying properties.



Avtex Revamp Establishes

each of the divisions headed by its or becomes president and chief openly

Kenneth W. Baldwin, formerly vice presion, has been named president of Av.

Mr. Gregg points out that with import

Baxter Travenol

The job reductions will mostly invi-salaried management, professional, admi istrative and ciercal positions. Costs asso-ated with the method positions covered by itated with the program are covered by serves established at the time of the mere

James E. Crutchfield

New Divisions

Avtex Fibers, Inc. is being renganized into two operating divisions, with president. In addition, James E. Cruth field, formerly executive vice-presided officer of Avtex Fibers.

David A. Tousignant, formerly vice ye dent of purchasing, has been named p dent of Avtex Fibers Front Royal, lac. operating company which manufactu rayon stuple and continuous filamentya: well as polypropylene, specially libers sodium sulfate.

dent of manufacturing for the filament Fibers Lewistown, Inc., a manufacture flat filament polyester used in a variety textile applications.

In making the announcements, John Gregg, chairman, emphasized that there ganization completes a decentralization Avtex Fibers, Inc. which began some e een months ago.
In its current state, Avtex has delegate

its operating presidents responsibility for phases of their operation, with the part providing financial support in the form ditreasurer's function, Mr. Gregg says.

Howard E. Pollard, formerly vicepres

dent and treasurer, has been named en tive vice-president and chief financial offic of the company and will operate as chief financial officer for the various Avies dis

Mr. Gregg points out that withinput let petition pressuring more and more let is share of the US market, US companies sill have to be able to respond quickly to the needs and requirements of customers in the opinion, this can best be done by a minimum of corporate staff and major dedication the operating level to providing customs satisfaction.

Plans Job Cutback

Baxter Travenol Laboratories will dira five months as part of a program to operations as part of a program
operations announced at the time of in
merger with American Hospital Supply (in
poration. About half of the reductions will
achieved the postal and the common will
achieved the postal and the common will achieved through attrition, the company

EPA Charges Continued from Page 5

From the first quarter of 1983 through the

beginning of 1986, the standard has been 0.1

The penalties are the largest ever pro

Violators of the regulations are subject to

pliance and adds that to an amount intended

A notice of violation, as issued in this case,

gram of lead per gallon.

to deter future violations.

highest ever called for by EPA.

be agency will be "as aggressive as neces-ary" in enforcing the Federal lead stansecond quarter of 1985, the standard was 1.1 gram of lead per gallon. The standard was reduced to 0.5 gram of lead per gallon for the third and fourth quarters of 1985. Since the

EPA says the joint business venture insaved an "intricate scheme" that began with importing leaded-gasoline blendstock from adous locations in Europe and ended with Ming lead to produce leaded fuel for sale to

posed for violations of the agency's lead It says the product was purchased by a phasedown regulations and are among the wiely of major and independent gosoline steters, and most of it was used in Northa civil penalty of \$10,000 per day of violation. Under EPA guidelines, however, violators

The agency contends that each party had a gorate role in producing the fuel. Accordare assessed penalties according to a formula that calculates the benefit of non-com-Lie EPA, Will Petroleum owned the much and was responsible for the overall seation. Triad arranged the purchase of blendstock, established production quanthe belped supervise the blending and aris the first step in prosecution.

sage the sale of the finished product.

It leased the blending facility and coorlated the actual blending operation. Du
lated the intermediate the blends and injected the be into the blending tanks.

PAmys it first became suspicious of Will Modeum while reviewing gasoline refiner particular while reviewing gasoline reliner inimporter records. It says agency staffers when the company was not filing paper reports. Two violation notices were issed to the company in March 1985, Will reported a few months later, but EPA continued to scrutinize the reports.

SEARCH WARRANT OBTAINED

In the Interim, EPA says it received sevsal assonymous tips that the company was walling the lead regulations. EPA obtained issuch warrant for Will Petroleum headcurters in Houston last February and began waxwer the violations.

PA says it was during the investigation, the spread through four states and rethe analysis of nearly three years of page inporting and blending operations, the agency learned that ATI was the and coordinator for Will Petroleum and saliling the reports on the product.

Mowever, EPA says ATI failed to report transum of lead in the blendstock and wently reported twice the amount of fuel Muced so that it appeared that Will Roleum was in compliance with the Fed-

haddition to the alleged excess lead-use darges, the agency also cited Will Patoleum and ATI for violations of the leadlating program. Under the program, gaso-producers that reduced lead below the Mable limits in 1985 are allowed to save That those rights for use or sale in 1986 or

Pacharges that both Will Petroleum and All reported generating lead-banking rights and 1985 when, in reality, they generated

Under EPA's regulations, all leaded gaso-Exproduced by a refiner in any given calena quarter must conform to an average in-per-gallon lead content estublished b

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FDA Gets Low Mark

Continued from Page 3

the most dangerous health risks," said Sen.

Wilson.
Even if FDA's tests prove negative, the report says there is no guarantee the imported food is free of health-threatening chemicals since the tests are not designed to

detect every pesticide.

GAO says when imported food is found by FDA to contain illegal pesticide residue, the agency is often unable to prevent the food from being distributed and consumed by the public. Many importers, GAO says, ignore FDA directives to hold shipments until they receive notice the commodities meet or fall

to meet Federal health standards. Of the shipments of food analyzed in Los Angeles in 1985, FDA determined 63 were contaminated with illegal pesticides. Of

these, 37 shipments were not recoved by Styrenics Engineering Continued from Page 7 fully recovered, and in 12 instances (ii) Styrenics Engineering could not determine what harmonics (iii) Styrenics Engineering the past year has been the best past year has been year has been year h

fully recovered, and in 12 instances (in could not determine what happened.

"When importers illegally distribute to be market contaminated foods," said Sa. Wilson, "they are rarely penalized. Compared to make the passenger safety remarket contaminated foods," said Sa. Wilson, "they are rarely penalized. Compared to make the passenger safety remarket contaminated foods," said Sa. Wilson, the material is very lightweight, parters not to go shead and distribute to the passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket. In addition to excellent energy contaminated foods, and beyond to meet passenger safety remarket contaminated foods, and beyond to meet passenger safety remarket. In addition to excellent energy contaminated foods, and beyond to meet passenger safety remarket. porters not to go ahead and distribute their contaminated shipments to domestic marks in humper cores, a technique per-

Sen. Wilson and Rep. Horton said they are working to devise legislation to strengthe and improve current monitorine and improve current and improve current monitoring and testing procedures for imported food Rep. Horton also said he plans to introduce

a country-of-origin labeling bill for head fruits and vegetables early in the 100th Co. ress. He said his proposal would require that, for fresh fruits and produce, the contry-of-origin be placed on the binor contains sign that now states the product and price

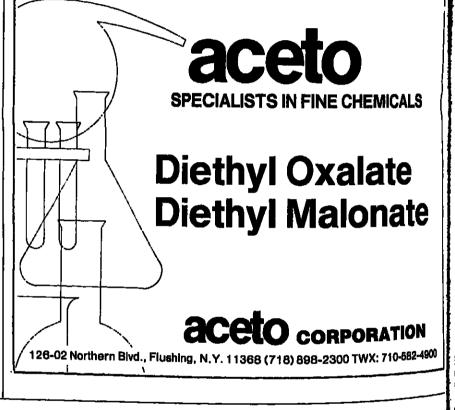
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Mam in bumper cores, a technique per ufactured by Arco JSP Company, is curwill being used for this application on Nisgan made in the US, with considerable must in the bumper design being evi-

y Jefferson reports increased marketing sand use of Arco Chemical materials in me primarily in the automotive sector. kurs the company now supplies a signifiportion of the European headliner marsundexpects to double market share in the

ration to five years. Four European cars are currently using Mediastrument panels with substrates of Mark" resin, the result of developmen essinitiated just two years ago, Mr. Jef

"Dytherm" resin and several of Arco's while foam materials were introduced in Empethis year and are undergoing market

Rais Boyle, manager, polystyrenics prod-standmarketing, told the editors Arco has and three grades of "Arpro" polypropylcaloan resin, a new cup grade bead, and a ially designed smaller bead for the "lost in foundry casting process.

All of the new materials have been develund to meet specific design and performintended in their respective areas of applion Mr. Boyle says. He cites increased seption of the cost/performance advan-ध्वर्त moldable foams as the reason for keessed product research and growing

FOLYOLEFIN FORMS OFFERED

udition of the three "Arpro" grades busing the number of polyolefin foams find by Arco under its joint venture ar-Cannot with Japan Styrene Paper and Valuabil Gas Chemical Company.

loyding to Mr. Boyle, success of both the lyo' resins and "Arpak" polyethylene is bas cued expansion of the JSP Litesture plant in Monaca a year sooner intaining in the expansion is currently carwy with completion expected the sec-Squarter of 1987

Recompany says the new cup and in costing resins are smaller size beads produce tight, smooth surfaces; for wedstrength and better printability in Aland the elimination of imperfections in

oter markets for the company's mold-it loans have been growing steadily, riggering increased product dement activities to meet demands of a grange of applications.

Epolited out that the number of "Dylite" adable polystyrene grades has more adoabled to satisfy needs for a variety of controlled shrinkage rates and betis wearance in the disposable packaging citabilion markets. Also, many new EPS Parka have been created to optimize the rational of the rationa

Estimate been created to optimize the same color of new processing equipment for Eps in disposable packaging has that one growth and market penetration in the past three to form the past three to be past three three to be past three to be past three to be past three to be pa the past three to four years, replacing is helace and corrugated materials in complications, according to Mr. Boyle. I shall make a second in the shall make the shall

EPS material also has seen increased residential and commercial insulation Addions he says. In this area, Mr. Boyle Conced his group will assume responsibilities. is marketing of the "Wallframe" build-istem, an alternative to standard methor residential and light commercial inclon. The system was introduced by Abilding Products, a business divested its company as part of its recent reorga-

h ther areas of application, Mr. Boyle wild continued growth in use of "Arcel" alter resin in reusable containers for machine and for foam boards used for

and general purpose polystyrene busi-

ness, the past year has been the best in the company's history, Mr. Boyle says. Sales exceeded the 8 percent increase exhibited by

Toxic Waste Unit Started in Illinois

Eticam Granite. Inc., a wastewater treatment and resource recovery firm, has begun construction of a facility for the processing of metal-bearing toxic waste in Granite City

The company's corporate affiliates currently operate a similar facility in Warwick, R.I., and plan to begin operation of a second US treatment facility in January 1987 in Fernley, Nev.

Once completed, the \$9-million Granite City facility will treat one and one-half million gallons of toxic waste per month generated by metal finishing and electronics com-panies within a 250-mile radius of the plant.

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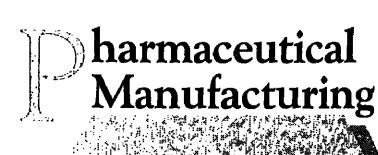
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DRUGS & FINE CHEMICAL Dismisses Suit

ITC to Vote This Week On Aspirin Anti-Dump Petition Sylvariand, who alleged that he was splitterland, who alleged that he was splitterland, who alleged that he was fired in 1985 becfause he refused to approve some \$12,000 in payments to a splitterland some scheduled to vote this week on a preliminary determination of the effect that A company could be approved applications. Johnson & Johnson &

crease as "minor," principally cause

increases in the raw materials used

He specifically singles out ethylener

one of the precursors for the company which went up 2 cents in October.

In addition the source says stillered

PRICES TRENDLINES

WEEK ENDING DEC. 5, 1986

The Drugs & Fine Chemicals index

flects the prices of 10 representat

materials in this sector and the quan-

Chemical Prices Start on Page 36

of each produced in 1985.

CHANGES/UP

DRUGS INDEX

Dec. 5, 1986

Nov. 28, 1986

Nov. 7, 1986

Dec. 6, 1985

70 percent liquid solution.

effective January 1.

ride, will raise prices to the same le

that the price increase will hold. Source choline chloride is "moving well," str.

supported by the considerable expansion

Generally, the addition of choline chi

to animal feed reduces the incidence of

tain types of diseases. In chickens it i

icvelop a healthy bone structure and

helps with fat metabolism. About 1,000 m.

grams of choline chloride per kilo del

According to the latest Intern

Trade Commission figures, choline chi

production in the US increased slightly

However, industry sources maintain its

this particular drop does not present about term downward development, but raibent

tend to eat less. Many chicken farms at

The present increase is small in con-

the earlier rise in June. Industry some point out that, overall, prices have not con-

up with their previous highs when chich chloride cost well over 30c. a point.

Continued on Page 24

flects a seasonal change allowing for

added to the feed material.

for the preceeding quarter.

There is general confidence in their

CHANGES/DOWN

production of choline chloride.

nary determination of the effect that Turkish imports are having on US aspirin producers, according to an ITC spokesman. The vote comes as the result of a formal complaint filed by Monsanto Company, charging Turkish exporters with unfair trade practices.

In late October of this year, Monsanto complained to the ITC that the government of Turkey was subsidizing Turkish aspirin producers, giving them an unfair advantage in the US market. Monsanto called for a countervailing duty to be imposed on Turkish imports, a duty which would be equal and offseting to the Turkish subsidy.

At the same time, Monsanto filed an antidumping petition, saying that Turkish aspirin producers were selling material on the US market at less than fair value, and therefore hurting US producers.

These two actions are running concurrently with a third one filed by Monsanto - a generalized system of preferences action. This calls for the removal of Turkish aspirin from the list of imports enjoying duty-free status in the US.

Monsanto feels that this status is not necessary for Turkey to remain competitive with US producers. This complaint was filed in June, and was supported by Dow. Dow also supported the two more recent actions filed, according to a Dow spokesman.

While it is up to ITC to decide if pricing on Furkish imports is injuring domestic producers in the US market, it is clear from Bureau of Census figures that the volume of these imports has jumped appreciably in recent years. In the January-through-October 1986 period, 1.1 million pounds of Turkish aspirin was imported into the US. The figure for all of 1985 was less than this, totalling 957,000 pounds. Import volume for the year before iat was less than a quarter or that, just

QUALITY QUESTIONED China is the number two foreign seller of aspirin in the US. Chinese material has been kept from having too strong a position in the US market, though, due to questions about its quality, which one source calls "poor and

The aspirin market in general has been steady, sources say. Prices were increased last July, and have for the most part retained those new levels. There have been reports of weakened pricing, but industry sources say

that this has not occurred. Competition from competing analgesics cetaminophen and ibuprofen has served to keep a lid on aspirin's growth, which one ndustry source sees at 2 to 4 percent this year over last year. Ibuprofen has grown 'significantly," says a source. He cautions, though, that this is from a small base, and that ibuprofen still represents a small portion of the total analgesics market.

1985, up from 37,381,000 pounds 19 37,545,000 pounds in '86. For the third call' Meanwhile, Dow's new aspirin-salicylic acid facility is still going through sampling ter the production figures show a slight to 10,965,000 pounds from 13,559,000 pages for product acceptability, according to a Dow spokesman. "For the past nine months," ne says, "we've been going through fine-tuning to meet customer needs for consistent, quality material." Dow's old plant continues to run, and will be shut down when the new one is able to meet demand, he says. Both says the spokesman. the South where temperatures caneasil to 95 degrees Fahrenheit.

CHOLINE CHLORIDE - Nutrius, Inc. will increase its prices effective January 1, making this the company's second choline chloride price increase this year. New prices are as follows: 30c. per pound for bulk 70 percent liquid in tanktrucks, up 2c. For 50 percent dry material, 36c. per pound for bulk rders in hopper cars or hopper trucks.

NIACIN — Lonza, Inc. says that eff January 1, 1987 its list prices for nacid Bagged prices range from 37c. per pound to 40c. per pound, depending on quantity.

Federal Court

A Federal court in Newark, N.J., last seek dismissed a suit brought by a former Johnson & Johnson executive in

radismissed as Swiss officials were considand approval of the company's "Imunox" uniment for arthritis and herpes. The drug Germany and the drug is in phase 1 studies in the US.

Prof. Rudolf Preisig, has been on retainer since 1969, adding that "it is not unsual or improper in Switzerland to hire such an expert as a consultant." Prof. Preisig is chairman of the depart-

Johnson & Johnson said the consultant.

ment of clinical pharmacology at the University of Bern and also head of the College of

A company spokesman refers to the Inbis suit, Richard D'Agostino said he rease as "minor," principally as to the suit, Richard D'Agostino said he ment related to his termination. According to Johnson & Johnson, Mr ment related to his termination.

"Imunox" is on the market in Italy and

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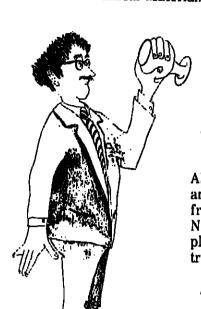
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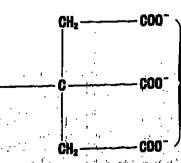
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FARMOS GROUP LTD Turku, Finland

Continued from Page 22

DRUGS & FINE CHEMS

mal nutrition grade will be as follows: For lots of 25 to 225 kilos, \$6.85; 250 to 975 kilos \$6.60; 1,000 to 4,975 kilos, \$6.35; and 5,000 kilos and up, \$6.10. All prices are on a deliv-

Industry sources support the move, maintaining that the hike represents an effort to "bring back prices to their earlier levels in the 80's." There is agreement that the niacin market has recovered from its earlier precipitous decline and is on the road to stability.

One factor reported as adding to the increased demand for niacin is a more sophisticated understanding of animal nutrition. Numerous research studies suggest that increased intake of niacin insures maximum animal performance such as speedier growth

for broilers or more milk capacity for cows. PHENYLEPHRINE HYDROCHLO-RIDE — Henley Company, Inc. will increase and has potential as a growth promotent its price for phenylephrine hydrochloride, effective January 1.

New prices are as follows: up to 24 klass \$213 per kilo, up from \$210; 25 to 49 klass \$203 per kilo up from \$200; 50 to 99 kilos \$100 per kilo, up from \$189; and 100 kilos and one \$198 per kilo, up from 185.

The company, which imports pleny, ephrine hydrochloride from Germany, cite the falling exchange rate of the dollar against the German mark as the reason has the hike. The product is used for nasal decor

Upjohn Licenses Drud

Upjoin Company has acquired exclusive rights to develop and market a new anilbloke complex in all countries except Japan The new product, neoviridogrisein (NVG), wasde veloped by Sanraku Inc. of Tokyo, a leading Japanese fermentation company. The product, which will be co-marketed in Japan by Upjohn and Sanraku, is being tested as feed additive for cattle, chicken and swing product for farm animals, according to Up

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INOSITOL



FDA Okays PVC

Continued from Page 5

ment, but has expressed concern about potential disposal problems.

There is evidence that dioxins are released into the air when PVC is incinerated, and a new flood of unrecyclable plastic would fur-ther strain the nation's overburdened waste

PVC's packaging applications are presently limited to non-food items such as engine oil and hardware products. But FDA says technological advances in the manufac-ture of PVC packaging have reduced the level of vinyl chloride to safe amounts.

A spokesman for the Society of the Plastics

Industry says member companies are pleased by FDA's proposal "to reaffirm the

safety of PVC food packaging."

He also said the increased use of PVC packaging for foods would lead to the replacement of other types of plastic materials, but would have only a minimal impact on glass and metal containers, except possibly for liquor bottles.

The SPI spokesman says the key to preventing dioxin contamination "is properly

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and the buyers of chemicals and services.

Schering-Plough

Continued from Page 9

the company's target of \$25 million for the full year. Key's line of "Nitro-Dur" transdermal nitroglycerin patches had a nine-months sales increase of 22 percent.

 The company recently introduced Key's "K-Dur" into the potassium supplement market, and expects to market "Normazide" antihypertensive next year.

• FDA approval is expected shortly for "Proventil Repetabs," which Mr. Kogan says is "the only BID beta antagonist to be marketed in the US."

• Key's "Diasorb" anti-diarrheal is now being introduced, and the company expects FDA approval in 1987 for "QuinaDur," a re-portedly unique sustained release antiarrth-

"Fibre trim with Calcium," an extension of the existing "Fibre Trim" line is being launched right now.

R. Lee Jenkins, executive vice-president for consumer operations, reported sharp in-creases in 1986 for the company's relaunched "Coppertone" sun-care line and an expansion of the "Dr. Scholl," foot-care busi-

Mr. Jenkins noted that "Maybelline" eye cosmetic sales bounced back in October with a double-digit increase, and the pace is con-

tinuing through November and December.
Dr. J. Allan Waitz, president of the company's DNAX Research Institute, and Dr.
Jonathan Spicehandler, vice-president of clinical research, reviewed progress in the company's biotechnology research and clinical research efforts, respectively.

Robert Baldini, senior vice-president for Key Pharmaceuticals marketing and sales, and Jean-Pierre Garnier, senior vice-president for Schering over-the-counter products, reported, respectively, the successful integration of Key and Schering-Plough pharma-ceutical operations, and the recent shift in the company's OTC business strategy toward enhanced market competitiveness.



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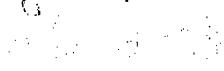
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Chloralkali Price Hike For 1987 & Gaining Industry-wide Support

produce to chiorine and causate source desired to chiorine and causate source with the desired company. Initial indicahow Chemical Company. Initial indicains from industry observers are prices doub products should strengthen some a January, although chlorine will have

measier time of it. Dowlead off with a \$10-per-ton increase in teoff-list price of chlorine and a \$25-per-ton rresse in the price of caustic soda solution. active immediately for spot business and stems allow for contract husiness (CMR.

Occidental Chemical Corporation, Olin appration and, reportedly, PPG Industries his followed, but with the exception that by are asking only \$15 per ton hikes on

Reincreases are coming after October 1 numements on caustic soda alone. Proconsthen asked for \$25 to \$30 per ton and amio \$10 per ton. Chlorine prices are said thre held relatively stable since that per-

Producers point to current industry operrigrates as supporting an initiative. The Mipercent, as reported by the Chlorine bitte, is the highest in over three years. kostitute reports a drop in October to an rating rate of 86.1 percent, although at देवल producer is skeptical of this numradhels October as well as November widen was on par with September. SUPPLIES SNUG

Spply and demand for chlorine are conse-ह्यों said to be in good batance with supply shy on the tight side. As one producers kil, "any plant outage would certainly be

io supporting a chlorine increase is a slrong export market for vinyl, mainly telorm of VCM and EDC. For the first and the year, for instance, VCM exports reabout 295 million pounds ahead of last gamark of 422 million pounds. astindustry observers feel a chlorine in-

time of \$5 to \$10 per ton is likely, given sent market conditions. One chlorine laments, "Its a sellers market today." teastic soda side of the equation is not ky for chloralkali producers, however. In the from Europe continue to affect the अ(east market and inventories, although are than at the beginning of the year, are where producers would like them. * producer estimates that inventories decreased from dangerously high Janu-गृक्षिक near 30 or 40 days of product de-to lo a current level closer to 15 or 16

distile soda imports through October tothe 193,800 tons, according to Bureau of the law over 7 percent from the same pridlest year.

Epots, however, are also up, by about the sue percentage, to over 1 million tons tough October. Almost 70,000 tons of that lanto Brazil. According to one source, dehad there went up in the third quarter landy as a result of a price freeze that

Major chloralkali producers are re-goding to chlorine and caustic soda feels the shipments to Brazil helped tighten

Observer estimates of the chances of a caustic soda increase vary widely. Most say the Northeast market will be resistant due to imports and production in Syracuse and Ni-

PRICES TRENDLINES

WEEK ENDING DEC. 5, 1986

CHANGES/UP

CHANGES/DOWN

HEAVY & AGINDEX

The Heavy & Ag Chemicals index reflects the prices of 18 representative materials in this sector and the quantity of each produced in 1985.

	Chemical Prices Start on Page :	36
ec,	6, 1985	113.69
OV.	7, 1986	113.69
ov.	28, 1986	113.69
ec.	5, 1986	113.69

agara Falls. The Midwest is thought of as more willing to accept an increase, possibly as much as \$10 or \$15 per ton. The Southeast including the Gulf Coast area, is disputed, with increase estimates ranging from nothing to \$10 per ton.

Some in the business have said that 1987 caustic soda prices will follow their classic cycle and drop off in the first half as chlorine lemand from the vinyl industry picks up.

Others, however, note that the vinyl chloride monomer industry is operating close to capacity and may not be able to pick up production significantly. Those of this opinon feel slow but steady growth in caustic demand will actually improve the co-product balance and keep caustic prices firm through the first half of next year.

BASES & SALTS

FERTILIZER CHEMICAL OUTPUT: SEPTEMBER

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LITHIUM CHEMICALS - Lithlum Corporation of America notes that its price inrease on lithlum bromide, fluoride and chloride products (CMR, 12/1/86, pg. 32) is effective December 1, 1986, not December 15 as previously announced.

SODIUM PERBORATE - Degussa Corporation's Chemicals Division has announced an increase in the price of sodium perborate monohydrate, offective January 1, 1987.

The new price is \$61.50 per hundredweight up from \$58.50, in truckload quantities (24,000 pound minimum) in 75 pound bags, f.o.b. stockpoint. Degussa maintains US stockpoints at East Brunswick, N.J., Chicago and Los Angeles. A \$3 per hundredweight transportation differential is added for shipments f.o.b. California stock.

A spokesman attributes the increase to higher production costs and to the weakening

Cesium Chemicals

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CHEMICAL MARKETING REPORTER December 8, 1986

The section of the se

AUG. 1,097,432 377,198 152,226 73,093 54,710 184,560 714,738 451,501 705,754 2,877,126 2,877,126 2,877,126 35,449 1,083,5149 472,505

1,240,912 532,059 190,686 149,416 48,732 243,581 778,661 620,830 3,375,157 247,529 18,132 1,235,472 452,938

PEROXIDE TIMES

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BASF

HEAVY CHEMICALS

n the value of the dollar. Degussa makes odium perborate overseas, and claims to be the largest producer in the world. Also making the product overseas is Interox. Du Pont makes sodium perborate tetrahydrate in the

Sodium perborate monohydrate releases hydrogen peroxide when dissolved in water, and is used as a bleaching agent in a variety of applications, including laundry products and denture cleansers.

Procter & Gamble is currently test marketing a detergent called "New Science Tide" which contains sodium perborate. If successful, and if sodium perborate is the bleaching agent decided on, perborate de-mand could increase significantly.

INDUSTRIAL ACIDS

SULFURIC ACID - Stauffer Chemical Company has announced an off-schedule price increase on sulfuric acid produced at its Hammond, Ind., facility. The increase is effective January 1, 1987, or as contracts per-

Increases are as follows: 93.19 percent (66 degree Baume) sulfuric acid is increasing \$5 per net ton, not to exceed current schedule of \$64.50 per net ton; 98 to 100 percent acid is increasing \$5.35 per ton, not to exceed current schedule of \$79.25 per ton; all oleums are increasing \$5.35 per ton, 100 percent H₂SO₄ basis, not to exceed current schedule of \$82.25 per ton. Prices are freight equalized with nearest competitive producing point.
Late last week Essex Industrial Chemi-

cals, Inc., a subsidiary of Essex Chemical Corporation, announced that effective December 1, 1986, or as contract terms will allow, the price of sulfuric acid and oleum will be increased by \$5.35 per ton, (100%

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BASF Corporation Chemicals Division

BASF Acquires Continued from Page 3

MALBASF says the "Zerex" purchase pound-per-year Morris, Ill., plant. ales the company the largest backward regated antifreeze producer in the US, and second largest overall seller of anuneze BASF expects to market over 40 brex"contributing up to 10 million gallons the total. Sales of this magnitude will

med the company's rated ethylene glycol capacity at Geismar, but not all of it is marked for the antifreeze market. Asing company sales of 45 million gallons, up s EG requirements will run as high as imilion pounds for antifreeze production te However, the company has not se-

SF spokesman says the extra EG needed Come from its German parent, if possior from the open market. MSF's expansion closely follows Old ishis push to improve its market share in 23atifreeze business with the purchase of 2 Peak", "All Weather", and "Sub Zero" 130ds from Euron.

uda supply arrangement with Conoco. A

haddition to the labels, Old World, which snot produce ethylene glycol, has secured in year, 20-million-gallon-per-year EG and from National Distillers & Chemi-அம்முரு ation, which bought Enron's chem-

aloptations in September. Tabibe "Peak" purchase, Old World says ஙிக்களை a 45-million-gallon-per-year Andanifreeze and coolant, a figure sevaloservers claim is 5 million to 10 million abshigh In addition to "Peak", which Old dillock over on December 1, the company and pri-sale product.

sms say, Old World should be able to ्राज्ञां of "Peak", because it has a far speciaging network than did Enron. mi only packaging facility was at in Ill, while Old World has 17 botrunt around the US. The greater packintwork allows Old World to move anwaround the nation in bulk at a far mer savings than shipping bottled

Lites say the cost disadvantage posed by - goly one packing plant may have fig-de Earon's decision to sell the business. ite lime, the company said the sale was ided to belp reduce the company's debt. | World's 20-million-gallon-a-year suprestract will absorb most of the EG out-

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tions on its "Conoco" and "Ice King" put from National Distillers' 200-millio

Sources say Enron used this output to dom inate the important Chicago-area antifreeze market, a position some sources say Rolling Meadows, III.-based Old World will assume.

Carbide's sale of its "Prestone" business to First Brands earlier this eyar has not removed Carbide from its dominant position in the ethylene glycol business, but some sources say it has shaken "Prestone's" lock on the market place.

Though still far-and-away the largest national brand name antifreeze (roughly 45million gallons in sales), one source says the transition to First Brands has disrupted and 'educed sales of "Prestone"

Nevertheless, Carbide remains the largest seller of EG to both the antifreeze market and to the polyester fiber market. The company sold its premium-priced "Prestone business and other consumer products as part of a plan to reduce the massive debt it occurred fighting off a takeover by GAF.

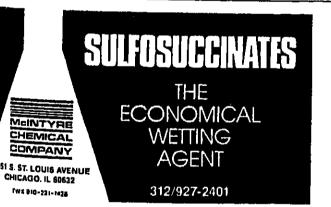
Total sales of antifreeze topped 230 million gallons last year. In 1986, inventory carryover from 1985, coupled with milder weather early in the year is expected to reduce sales to about 215 million gallons, although producers report business has been extremely strong this Fall.

Next year, in the first full year of their expanded product lines, BASF and Old World will emerge as the second and third largest antifreeze sellers, respectively, in the US, according to a survey of producers.

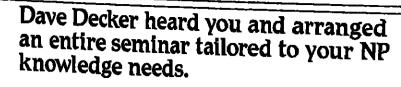
Carbide, through its contractural commit ments to First Brands, and its sales to private label and bulk buyers, will account for about 70 million gallons of antifreeze. BASF will follow with sales exceeding 40 million gal-lons, followed by Old World, which will market between 35 million and 40 million gal

Next comes Texaco, which has made strong push in recent years and now sells at least 25 million gallons per year of antifreeze. Shell markets 15 million to 20 mil lion gallons of material, and Conoco's sales will fall to 10 million to 15 million gallons after the "Zerex" sale.

After Conoco, Celanese, ICI, and Dow all sell 5 million to 10 million gallons of antifreeze to the market, although it was noted one source that Celanese's output will probably be given over to American Hoechst's fiber operations following Hoechst's acquisition of Celanese.



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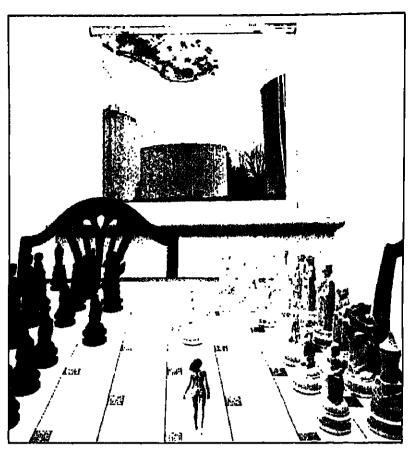
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CHEMICAL MARKETING REPORTER

December 8, 1986

CFC Cap Urged By WRI Continued from Page 5

late 1970's, global CFC use has increased

Known and suspected effects of ozone depletion include increased skin cancer, suppression of human immune systems, harm to aquatic systems and biological organisms, exacerbation of smog in some urban areas, degradation of some plastics and paints, and aggravation of the greenhouse effect.

With equipment design advances, according to the report, most car air conditioners could use fewer CFC's, at an insignificant additional consumer cost, compared to the total price; leakage, which represents a significant share of total CFC production, could be greatly reduced.

"Opportunities for reducing CFC emissions by recovering the compound and by cleaning the captured chemical for reuse are

substantial," the report says, especially in CFC's used in degreasing and cleaning.

Recapture and recovery of CFC's in fig. ible foams through carbon filtration, for ample, can reduce operating losses by a percent; similar techniques can halve emb sions of CFC's used in manufacturing rig

Some CFC formulations, however, present much less of a threat to the ozone layer, On commercially available option is CFC 2

In addition to less harmful CFC formul-tions, product substitutes for most CFC use exist. These include hydrocarbons as proper lants for aerosols.

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Section 1880



COATINGS & PLASTICS

PVC Producers Continued from Page 9

pipe applications. Not only do they conand that PVC is environmentally safer which "degrades so rapidly in the atmosphere that it is only one-fifth as powerfular corporated in depleting ozone."; CFC 22 conditioners and refuge the corporated in the cor ion resistance, requires no welding, nsis less than metal pipe and can be estalled in little more than half the time

> California plumbers, citing the results of the Montgomery study, allege that PVC Maches hazardous levels of trichloro-mellane and chloroform. They also claim that the organic solvent cement used to join the piping leaches unacceptable levels of MEK, cyclohexanone, THF and other organic monopounds. Furthermore, they say, NIOSH has questioned the validity of the solvent ce-

mery study contained many procedural in-muscles. For example, phthalate esters, sed only in flexible PVC production, were found in the leachate, suggesting that flexible olog, rather than the rigid PVC used in ripe, was used in the test.

As far as the solvent cement issue is conemed, he says, organic levels dissipate after ight months; a thorough flushing of the pipe bloreuse will eliminate the problem.

the California Housing and Community disclopment, pressured by plumbers union pops, contracted additional studies of PVC ring and recommended a complete Envi-

EIR STILL PENDING

Four years later, the report is still not first laisted. As Mr. Gottesman explains, the first assiling firm hired to conduct the study, kided the procedure. Now HCD wants to cadect the test in conjunction with the Uni-

last year, the Vinyl Institute conducted a solvinconjunction with McKesson Environtotal Services, using a "worst case" plastic be system with CPVC, and contrasting achate levels with those of a traditional

Control of the project was turned over to consultant, and results submitted this ily showed no carcinogens leached from ather the CPVC or the solvent cement, and by trace amounts of other organics, in the ärt-per-billion range.

h contrast, the metal system leached poadally hazardous amounts of copper and ad from solder. Other non-lead soldering calerials such as arsenic were also found in te metal pipe leachate.

Meanwhile, California plumbers are deter-mined to fight use of PVC and other plastics. falle plastics producers maintain that Aumbers really fear the effects PVC will be to increased "do-it-youself" plumbing, Cacalifornia Pipe Trades Council maintains that public health is its primary concern.

John Gorman, a representative for the goup questions the validity of the McKesson lest, citing "lack of forthrightness" on the land plant. an of plastics producers in previous tests. in Leonardini versus Shell Oil Company, a which came to trial in Sacramento last er, he says, it was found that fittings used b join polybutylene pipes were leaching tri-tane, formaldehyde and other carcinogens.
While the plumbing pipe controversy con-lates in California and the state reviews the

THERMOPLASTICS

BULK PRICES IN NOV. 1986 Propylene, molding1b. .34-.38 .33-.37 rvinyi chloride, pipeib. .34-.37

McKesson tests, other states have fully approved its use in water pipe.

Some controversy continues to surround PVC's use in electrical cable. The NEC had restricted its use to buildings of three stories and under. Recently, this restriction was re-

moved, a major victory for PVC producers. The National Institute of Building Sciences has been working to develop new material testing methods which may potentially help PVC, shifting the focus away from toxicity alone to factors equally important in a fire: flame spread and ignitability.

Focusing on toxicity alone is too simplistic an approach, says Gene Brewer, president of NIBS. Although toxicity levels must be con-

PRICES TRENDLINES

WEEK ENDING DEC. 5, 1986

CHANGES/UP

CHANGES/DOWN

COATINGS INDEX

The Coatings & Plastics index reflects the prices of 13 representative materials in this sector and the quantity of each produced in 1985.

Dec.	5, 1986	306.4
Nov.	28, 1986	306.4
Deç.	8, 1986	306.4
	6, 1985	306.4
	Chemical Prices Start on Page 3	

sidered, he says, materials considered toxic continue to perform best in a fire.

Ruling out potential toxicity destroys other properties which may be equally important in saving lives. Currently, Mr. Brewer says, the Institute is developing one standard evaluation procedure to be used by architects, contractors and interior design-

The National Center for Fire Research and the National Bureau of Standards are close to completing a fire hazard computer model, evaluating not only toxicity but flame spread and other performance factors.

This new approach, says Mr. Gottesman, can only have a positive impact on the vinyl market. Toxicity problems are not being ig-nored, however. NIBS's Brewer says that material mixes are being evaluated to lower toxicity levels. Several polyolefin producers are also working on developing non-halo-

genated wire technology.

Cross-linked polyethylene, which is currently being used with ATH in non-halogenated electric cable, specified by the US Navy, has not yet had any sizeable impact on the market.

Although Union Carbide Corporation has developed a line of polyethylene products which, it hopes, may eventually replace PVC in construction, Mr. Gottesman says that it has not yet penetrated the commercial building wire and cable market.

Another remaining snag concerning PVC use in food packaging and bottles has been removed, as the FDA has approved the plastic for food packaging applications (see p. 5). In 1974, vinyl producers first ran into prob-lems when the FDA ruled that the plastic could not be used in liquor bottles. Once new processing techniques were developed, which remove all traces of VCM from food-

grade packaging resin, vinyl makers reapplied to FDA for packaging approval.

The comment period of the evaluation process ended in June, but, subsequently, environmental concerns were raised alleging that incineration of PVC would lead to increased dioxin emission levels.

Mr. Gottesman reports that several recent tests have shown that incinerator operating procedure, rather than PVC controls dioxin

Municipal garbage, he says, already emils Continued on Page 53



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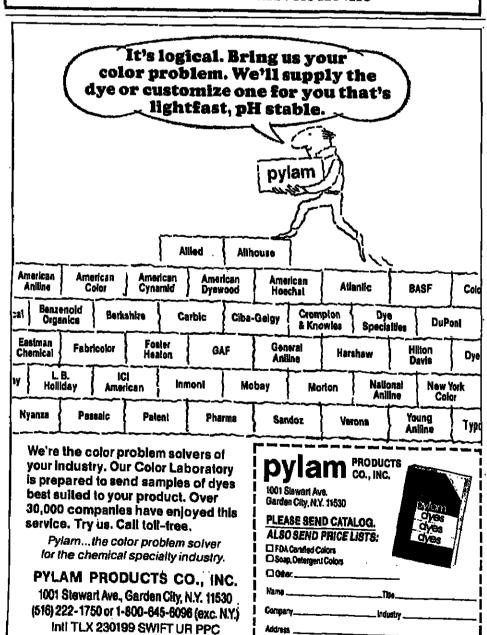
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CHEMICAL MARKETING REPORTER

Lime Oil Prices Remain Soft Due To Backlogs, Oversupply

of decreases earlier this year, coming porter. down from \$7.50 per pound, f.o.b. as of January 15 to the current level of \$5 to \$5.50 per pound. The 1986 price drops were on the tail end of a trend that began in late July 1984, when lime oil weakened from \$15.35 per pound to \$12.85 per pound in August.

Through 1985, lime oil prices fell from \$12.85 to \$7.50 per pound; imports recorded a 220,000 pound increase as a result of the supply ease and attractive pricing. 1984 total imports were 1.153,155 pounds; 1985 imports totaled 1,373,394 pounds.

With the 1986 low \$5 range, however, imports have not surged, disappointing the hopes of importers who anticipated increased sales with the soft pricing. Through September, 1986, 986,658 pounds of lime oil have been imported; during the same period in 1985, 1,090,393 pounds were imported.

Mexico leads the countries exporting lime oil to the US with 70 percent of the 1986 imports. Peru is the second exporter to the US with 10 percent, and Halti is third with about 5 percent. All told, 16 countries have exported lime oil to the US in 1986.

The popularity of Mexican lime oil, explains an essential olls broker, is a result of its longevity compared to other, newer sources. "Mexican lime oil is considered the premier quality material because it's been around the longest and has wider applications than its competitors." Due to this popularity and the quantity produced, pricing levels set by Mexico govern the international

GOVERNMENT PARTICIPATION The broker attributes the dramatic price declines to the Mexican government's participation in the lime oil market. "The Mexican government went into lime oil to compete with the private producers and together they produced too much." Lime oil production exceeded demand to the extent, he says, that the \$5 range is below the cost of production.

Peruvian exporters, in a bid to retain their share of the market, have brought prices down to around \$4.50 per pound, says an essential oils importer. There, too, "prices are below the cost of production." But, according to another broker, demand for Peruvian lime oll is still off, thanks to oversupplies of Mexican material: "Peru's imports are off a little, primarily because Mexico's are up."

Haiti's lime oil has suffered a great deal. says the essential oils importer, because "Haiti cannot afford to go below production costs." Haltian material is currently offered at \$6 per pound.

Aside from the government competition with private lime oil producers, the exchange rate for the Mexican peso has increased profits for exporters. "Where in 1984 they got 200 pesos to the dollar, they now get 800," says the source. Though inflation levels have a detrimental effect on the average Mexican

Lime oil pricing experienced a series citizen, he says, it actually benefits the

"Buying interest has been steady," says broker, "but it's a bit flat considering the price." Affecting demand, he adds, is the backlog of material waiting in Mexico. "The Mexican government is trying to move these backlogs despite the losses they may incur. Another essesntial oils dealer says the ir

ventories in the US have built up in the US a **PRICES TRENDLINES**

WEEK ENDING DEC. 5, 1986

CHANGES/UP

Allapice, Central American, 2c. per lb.
Anise seed, Turkish recleaned, 5c. per lb.
Bergamot oil, 50c. per kilo
Chillies, Pakistan Dundicuts, 2c. per lb.
Chillies, Pakistan Dundicuts futures, 5-7c. per lb.
Cumin seed, Chinese/Turkish, 3c. per lb.
Ginger root, Chinese whole, 1-2c. per lb.
Howood oil, 90%, \$1.25 per kilo
Laurel Leaves Turkish fance, 10c. per lb. Laurel leaves, Turkish fancy, 10c. per lb. Lemongrass oil, 10c. per lb. Litses Cubebo oil, 15c. per kilo Nutmege, East Indian delivered, 2c. per l Nutmeg oil, East Indian, \$1 per kilo

CHANGES/DOWN

Cedarwood oli, Chinese, 20c. per kilo Celary seed, Indian, 1c. per lb. Cloves, Madagascan/Brazilian, 10c. per lb. Cloves, Madagascan/Brazillan, 10c. per Eucelyptus, 70%, 10c. per kilo Oregeno, Mexican old crop, 10c. per lb. Rosemery oli, Tunielan, 51 per kilo Turmeric, Alleppey FAQ, 2-3c. per lb.

PERFUMES INDEX

The Perfumes & Flavorings index (flects the prices of 11 representative materials in this sector and the quantily of each supplied in 1985.

	Chemical Prices Start on Page 36	
Dec.	6, 19857	1.0
	7, 1000 1,111111111111111111111111111111	4 0
Nov	7, 19867	1.0
NOV.	28, 19867	1.0
	07 4000	4 (1
Dec.	5, 19867	1.0

a consequence of 1985 buying and that buying interest is likely to fall off.

The outlook for lime oil, sources agree, is for continued soft pricing. "Mexico is still generating it even though they can't get ride what they have," says one source. According to one broker, "sources in Mexico have atnounced that they will keep these prices in through the first half of 1987."

AROMA CHEMICALS

CIVET - Civet imports have been reg tering steady advances over 1985 levels will a January-through-October 1986 total 26,888 ounces, compared to 18,071 ounces! the same period of 1985. Bureau of Censu figures for 1988 have been adjusted to account for civet compounds and "concoctions which may contain varying amounts of nate ral civet.

Concerning the renewed importing inter-Continued on Page 53

PERFUME & FLAVOR IMPORTS: SEPTEMBER, 1986

CENSUS BUREAU REPORTS ON TH	EKEYAR			SEPT. 1
Depart Apple	SEPT. '86		YR to Date '66 1,115,399	221,34
Benzyl Acetaleib.	150,507	171,737	89,698	
	24,423	3,306	95,936	41,11
VINDIT 1 1 1 1 1 1 1 1 1	23,920	13,889	126,688	10,70
	1.810	1,465		
	6,080	3,732	31,362	26,23
WITH A CHIMIN 17 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	36,376	63.934	340,378	47,76
	3.083	33,269	203,130	12,17
	8.589	13,343	84,613	40.9
	20,000	22,686	231,633	33,97
137412476HUMBHH	20,000	4.798	255,265	2.3
	1,763	440	21,482	38,31
	110	51,483	468,918	•
	91,437	132,133	828,280	
	227,208	123,887	1,910,832	73,5
	51.588	122,180	837,519	97,8
		163,334	1,242,710	124,6
	169,852	90,983	1,240,034	(1.15 m)
	9 9,320	15	3,197	4,1
	276	2,605	209,840	189,0
Vanillin	93,510	210,273	2,369,507	1
	115,538	210,210	P 100	

PERFUMES & FLAVORINGS CHEMICAL IMPORTS

Crimaterial. Listings include consignee where possible, container, net weight. name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

us chemical imports/exports are tabulated monthly in the market reports.

METIC ACID Crescent Chamicals 1 bxs (31 lbs) (Koln Express) Hamburg , 10/21.

Express) Hamburg , 10/21.

Express Hamburg , 10/21.

NINUM OXIDE Degussa 2 bks (86068 lbs) (Anders

MINUM PASTE Synergistic Pigments 389 dins (43918 lbs) (Koln Express) Harnburg, 10/21.

| Penin Yokohama) Keelung, 10/31. | NAMUM HYDROGEN CARBONATE Croscent Chemicals 2 bxs (97 lbs) (Koln Express) Hamburg.

MYONIUM PERSULFATE Mitsubishi Inti 2160 pkg (123096 bs) (Oriental Knight) Yokohama, 10/16 r.(PEOYES ICL 440 bgs (0 lbs) (Britta Thien) Hamburg.

and Ind Fwdrs 173 dms (1837) Ibs) (Koln Express) Rotterdam, 10/21. !\bay Chemicai 232 drns (17198 lbs) (Koin Express)

Branethavan, 10/21. HILLONY METAL Minmetals 340 cs (80203 lbs) (Barber Paseus) Hong Kong, 11/1. r/miONYTRIOXIDE M & T Chemicals 1360 bgs (75856 baj@arber Perseus) Hong Kong, 11/1. NIWONY-POTASSIUM TARTRATE D Hauser 600

drs(17714 lbs) (Kurobe Maru) Kobe, 10/25 scorett ACID 100 dms (13007 lbs) (Valea Alba) Con-WANT CARBONATE Cometate 1360 bgs (75856 lbs) Nurobe Meru) Kobe. 10/25. WHYDROXIDE Kali Chemie 720 bgs (0 lbs) (Argo-

hil Chemical I700 bgs (39700 lbs) (Wiadystaw Siko-WSULFATE E Z EM 2520 bgs (189754 lbs) (Pilar)

l Chase Manhettan Bank 1000 bgs (27557 lbs) (Strathconon) Felixatowe, 10/23. (Strathconon) Felixatowe, 10/23. (Strathconon) Felixatowe, 10/23.

AX Kosler Keunen 120 ctn (7110 lbs) (Britis Thion) SEYL ACETATE Curto & Funk 76 drns (36872 lbs)

iOrlanial Knight) Hong Kong, 10/16. NYL ALCOHOL COF Chimle 1 Ink (40565 lbs) (Win-ବ୍ୟକ୍ତ Skorsk) LeHavre, 11/10. JOX LOCUST SEED Payne Seed 360 bgs (39683 lbs)

(Brita Thien) Rotterdam, 10/30 Missibasi (George Washington) Kachslung, 11/4. M. AIETHACRYLATE Rohm Tech 109 dms (15549) k)(Wiadysław Sikorsk) Rotterdam, 11/10.

XIJM PIGMENT C H Powell 25 dms (5346 lbs) (Lexii Msersk) Tokyo, 10/31. CAM CARBONATE H M Royal 4001 pkg (205314

taj (Kurobe Maru) Kobe, 10/25. RUBA WAX Sirahi & Pitach 1680 bgs (133612 lbs) Libyd Atlantico) Fortaloza, 11/1. SEW NUT SHELL LIQUID Colloid Chemical 34 bks

(987682 lbs) (Rio Esquel) Fortaleza, 11/4. hanera Tropical Market 1 bks (440920 lbs) (Rio Es-कुर्शिताबेश्य, 11/4. ASSA KORINTJI 300 bgs (33730 ibs) (Lexa Moorsk)

Sngapore, 10/31. CAGNC POTASH 720 bgs (45416 lbs) (Bnttlc) Rottorem, 11/3. CWSRC SODA Commodity Chemicals 1 bks (4845583

bs(Grenanger) Hotterdam, 10/24. 'axi Hydro Sales 1 bks (4408545 lbs) (Hoko Horo) Pargram, 11/5. :BERY SEEDS Grosons 170 bgs (22487 lbs) (George

Washington Bombay, 11/4.
Washington Bombay, 11/4.
Mashington Bombay, 11/4.
Mashington Bombay, 11/4.
Solil Food Products 200 bgs (26455 lbs) (George

(rasington) Bombay, 11/4. LORODIFLUOROMETHANE John Steer 1 tnk (37015 sering American 1 tok (38486 ibs) (Rosario) Rotter-

LIVER OIL La Prefrida 840 cm (27844 ibs) (Britta Titen) Rollerdam, 10/30. AIBA Oil, Polarome Mig 12 dms (5159 lbs) (Henrique

(san) Santos, 9/22. AM OF TARTAR Tartaric Chemicals 440 bgs (44974 Barcelona 10/31.

Laboratories 60 bgs (6614 lbs) (An-Ora Maerski Dubai, 10/22. IRIN 2520 bgs (140258 lbs) (Sea Land Voyager) Ronerdam, 10/15 ATROSE CE De Candy 380 bgs (40:159 lbs) (Britta Theni Rohardon, 10/20

Then) Rotterdem, 10/30, IROtterlie 420 bgs (42324 lbs) (Stratchonon) Rotter-dam, 10/23 MLYL PHTHALATE Nichimen 200 bgs (10408 lbs)

Kurobe Maru) Kobe, 10/25 fors Container Service 900 bgs (46191 ibs) (Hanjir Yokobarra) ^{ла}ла) Busan, 10/31

DILL SEED A A Sayla 640 bgs (70970 lbs) (George Wash ington) Karachi, 11/4. T J Harkins Basic Commodity 105 bgs (13889 ibs)

(George Washington) Bombay, 11/4.
DIPHENYLAMINE 1 con (40146 lbs) (Kolri Express) Berio Imports 1260 cs (44209 lbs) (Pliar) Leghorn, 10/ Greenock, 10/21.
DYESTUFFS Voteiner Consolidation Servi 40 dms (2601 lbs) (Koln Express) Rotterdam, 10/21.
Shimazaki 48 plt (41799 lbs) (Oriental Knight) Kobe, Leghorn, 11/4. Grand Union 1400 cm (21870 lbs) (Ever Superb) Fos,

Inter Markimo Fwdg 50 dms (5622 lbs) (George Wash-Ington) Kobe, 11/4.

Ciba Golgy 333 mix (41353 lbs) (Strathconon) Bremer.

76 dms (36861 lbs) (Express) Valencia, 10/27. Richter Brothers 1107 crt (0lbs) (Ever Superb) Leghors Leyden Customs Expediters 118 kgs (31724 lbs) (Baltic) Rotterdam, 11/3.

Leyden Customs Expeditors 118 kgs (29123 ibs)
(Baltic) Rotterdam, 11/3.

Vilarroz 1632 ctn (34921 lbs) (Pilar) Cadiz, 10/31. Aid Transport 103 ctn (0 lbs) (Sea Land Voyager) Bre-Rienzi & Son 2533 crt (52910 lbs) (Pilar) Napies, 10/31. M S Walker 15 cs (0 lbs) (Anders Maersk) Valencia 6 pbx (0 lbs) (Sea Land Voyager) Bremerhaven, 10/15.

Biddle Sawyer 220 dms (14436 lbs) (Anders Maersk) DRANGE OIL JPM Imports 80 dms (33334 lbs) (Lloyd Allantico) Sanios, 11/1.

ORANGE EXTRACT Virginia Dare Extract 268 dms (11817 lbs) (Saudi Hoful) Jeddah, 11/4.

OREGANO E L Scott 1100 bgs (22046 lbs) (Argonaut) Dubai, 10/22, Livingsion Inti Freight 220 dms (14255 lbs) (Lexa

Maersk) Hong Kong, 10/31. Protameen Chemicals 72 dms (33651 lbs) (See Land Developer) Rotterdam, 10/31 Piraeus, 11/1. Quality Spice 1102 bgs (22046 lbs) (Argoriaut) Plareus

ENZYMES Novo Laboratories 396 dms (65226 lbs) (Ses Land Voyager) Bremerhaven, 10/15. 365 pcs (33501 lbs) (Sea Land Voyager) Bro

EPOXY RESIN Stolt Tank Containers 1 tnk (41998 ib (Hanjin Yokohama) Keelung, 10/31. EPSOM SALTS Potesh Import & Chemical 420 bgs (42370 lbs) (Strathconon) Bremerhaven, 10/23. SSENTIAL OILS SCAC Transport 5 cm (0 lbs) (Rosario)

LeHavre, 10/30. SCAC Transport 9 dms (0 lbs) (Rosario) LaHavro 10/ 7 dms (3009 lbs) (Henrique Leal) Santos, 9/22. 66 mix (0 lbs) (Express) Fos. 10/27

HYL L NAPHTHYL ACETATE Meiko Warehousing 10 dins (0 lbs) (Kurobe Maru) Koba, 10/25 THYLBUTANOL 1 con (35229 lbs) (Strathconon) Ro

Rollordam, 19/31. GERANIOL 9 dms (3848 lbs) (Britta Thien) Rotterdam.

GLUE F H Taussig 10 bgs (1102 lbs) (Zim Iberla)

Barcetona, 11/3. H B Fuller 25 pkg (50201 lbs) (Britta Thien) Bremer-

haven, 10/30. GLYCERINE Koystone Chemical 1 con (45481 lbs) (Lloyd

Aliantico) Santos, 11/1. Magna Kron 1 Ink (44621 lbs) (Lloyd Atlantico) Santos.

GUAR GUM Premcem Gums 800 bgs (40565 lbs) (Anders

ISOAMYL ACETATE Hankil Phoenix Transport 5 bdl (0

(Wisdysiaw Sikotsk) Rottsrdam, 11/10. ISOPHORONE DI-ISOCYANATE Nuodex 400 bgs (17787

SOPROPANOL Panalpina 144 ctn (3097 lbs) (Britis

Thien) Hamburg, 10/30. AURIC ACID Artex 800 bgs (44304 lbs) (George Wash-

Ington) Pt Kelang. 11/4.
LIME OIL 25 dme (1 1092 lbs) (Kolke) Callso, 11/7.
MALEIC ANHYDRIDE Crosby Chemicals 700 bgs (39167 lbs) (Hanjin Yokohama) Busan, 10/31.
MANNITOL A J Murray 24 ptt (39260 lbs) (Britta Thish)

MELAMINE 820 bgsd (45194 bs) (Zim Iberia) Hàlla, 11/3-MERCURY 500 fk (40234 bs) (Britis Trien) Rotterdam.

ISOPHORONEDIAMINE Nuodex 400 bgs (17787

OLYACRY/LAMIDE Mitsubishi Chemical Ind 600 bgs (30556 bs) (Hanjin Yokohama) Kobe, 10/31. OLYAMIDE POLYMER Alm Sales & Technical 200 bin dam, 10/23. ATTY ACID Organic Chemical 2 Ink (91227 lbs) (Rosani

OLYBUTADIENE JSR America 9 pkg (26817 lbs) ENNEL SEEO Quality 480 ctn (52910 lbs) (Zim lbena) (Kurobe Maru) Tokyo, 10/25 POLYVINYL ALCOHOL Marubeni America 80 pkg (8501 Piraeus, 11/3. LUOROCARBON POLYMER Nichimen 22 dms (2619

lbs) (George Washington) Kobe, 11/4. DLYVINYL BUTYRAL Sekisul America 960 bgs (47619 lbs) (Loxa Maersk) Kobe, 10/31. Viking Sea Freight 1160 dms (141976 lbs) (Kurobe lbs) (Hanjin Yokohama) Kobe, 10/31. POPPY SEED KPM 20 bgs (0 lbs) (Oriental Knight) Singa GELATIN Nitta of America 176 dms (41517 lbs) (Zim New

pore, 10/16. POTASSIUM CHLORIDE Abbott Pharmaceuticals 800 Corbett Inii 212 dms (49775 lbs) (Ever Superb) Fos. 11/4. J T Sales 65 dms (41429 lbs) (Sea Land Develops)

Keelung, 10/31. MLM Express 770 bgs (39198 lbs) (Hanjin Yokohama)

Busan, 10/31. MUSK XYLOL Intil 400 cms (47973 lbs) (George Washing-

ton) Kobe, 11/4.
NEOPENTYL GLYCOL Nuodex 2000 bgs (91747 lbs)

(Rosario) Rotterdam, 10/30. NEROL 5 dms (5580 lbs) (Britta Thien) Rotterdam, 10/30. NUT Oil. Avi Intl 120 bri (7672 lbs) (Rosario) Rotterdam.

10/30. UTMEGS Leyden Customs Expeditors 720 bgs (56508

lbs) (Baltic) Rotterdam, 11/3. McCormick 859 bgs (43387 lbs) (Express) Foe, 10/27.

LIVE OIL Atlantic Imports 5 cs (0 lbs) (Express) Legnom

Bertolii 5016 crt (95102 lbs) (Pilar) Leghorn, 10/31. Bonolio Enterprises 535 crt (17663 lbs) (Ever Superb

National Food Trdg 75 dms (36211 lbs) (Pilar) Barcelona, 10/31.

Standard Imports 150 cin (1764 lbs) (Zim Iberia) Piraeus, 11/3.

Oromi 1076 bgs (13664 lbs) (CCNI Austral) Valparaiso.

OXALIC ACID Universal Cargo Management 1440 bgs (80468 bs) (Hanjin Yokohama) Keelung, 10/31

PALM KERNEL OIL Sølic Alcan 1 bks (5610018 lbs)

Yukohania) Hong Kong. 10/31 PENTANES Bear Stearns 204637 Bit (52162435 lbs

(New Vanguard) Pajarilos, 10/30 HENOXYACETIC ACID 792 bgs (45939 ibs) (Wladyslav

Sikorsk) Aotterdam, 11/10. OSPHORIC ANHYDRIDE 94 dms (44762 lbs) (Evor

(Shoun Marigold) Bullerworth, 11/8 PEANUT OIL Tai Wing Hong Imports 100 ctn (0 lbs)

Superb) Fos. 11/4.

bgs (44092 lbs0 (Sea Land Voyager) Bremerhaven, 10/15. ROPANE Trammo Gas Petrochemicals 98990 bri (17484588 lbs) (Paramacay) La Salina, 11/4 SYLLIUM SEED HUSK Premcem Gums 320 dms (34497

lbs) (Rosario) Felixatowe, 10/30. JMPKINSEED OIL Harlel Phoenik Transport 6 bri (0 lbs) (Bea Land Developer) Brememaven, 10/31. YRITES Billy C Wilson 2 dms (1190 lbs) (Kolka) Callao.

ROSEMARY LEAVES Wilson Group 221 bgs (15432 lbs) (Strathconon) Rotterdam, 10/23, BUTIN M Gurza Custom Brokers 10 dms (1268 lbs) (Lfoyd

Meorek) Dubai, 10/22. HEXAHYDROPHTHALIC ANHYDRIDE Nuodex 81 dms SALT inti Salt 1 bks (26113 lbs) (Fastnes) Bonaire, 10/24 (38003 lbs) (Strathconon) Rollerdam, 10/23. HIDE GLUE Nitta of America 1200 bgs (67728 lbs) (Zim SESAME OIL Tal Wing Hong Imports 80 ctn (0 ibs0 (Henjin Yokohama) Hong Kong, 10/31. SILICA POWDER Hysol 800 bgs (45371 ibs) (Hanjin Yoko-

New York) Osaka, 10/12. HYDROFLUORIC ACID Leschaco 1 con (33929 lbs) hama) Yokohama, 10/31. 3ILICON OIL Inter Maritime Fwdg 5 dms (2348 lbs) (Lexe (Strathconon) Bremerhaven, 10/23. BDP INtl 68 dms (36729 lbs) (Zim New York) Osaka, Maersk) Tokyo, 10/31. ILICONE OIL inter Maritime Fwdg 17 dms (8857 ibs) 10/12. Daniel F Young 136 dms (73308 lbs) (Zim New York) (Lexa Maerak) Tokyo, 10/31. LICONES Votalner Consolidation Servi 1 dms (498 lbs) Osaka, 10/12. HYDROQUINONE Mitsul 136 mlx (40505 lbs) (Oriental

Knight) Kobe, 10/16. HYDROXYLAMINE SULFATE Virginia Chemicals 720 bgs (40992 lbe) (Britta Thien) Rotterdam, 10/30. ODIUM BENZOATE Chibank 800 bgs (44971 lbs) (Vale Alba) Constanza, 11/5. DIUM CYANIDF Deguses 200 dms (43525 lbs) (Koin Express) Bremerhaven, 10/21.

DIUM HYDROSULFITE Omnitrans 257 dms (42194 ibe) (Baitio) Rotterdam, 11/3. ODIUM HYDROXIDE Charles A Reddan 343 dms

ODIUM METHYLATE Rhone Poulenc 360 bgs (40785 iba) (Strathconon) Rotterdam, 10/23. ODIUM NITRITE Rhona Poulanc 380 bgs (40785 lbs (Stratononon) Holterdam, 10/25. SODIUM TRIPOLYPHOSPHATE Inter Maritima Fwdg (

bbg (44974 lbs) (Zim Iberia) Halfa, 11/3. G Leschaco 828 bgs (42394 lbs) (Strathconon) Rotter Maxim Chemical 72 dms (45715 lbs) (Britta Thien) Ham

burg, 10/30. E M Ind 720 ctn (87655 lbs) (Strathconon) Bremei

E M Ind 720 cin (87655 lbs) (Rosario) Brememayar

METHYL ETHYL KETOXIME Troy Chemicale 78 dms (35853 lbs) (Britte Thien) Rotterdam, 10/30. METHYL SALICYLATE 152 dms (87796 lbs0 (Valea Albe) SPEARMINT LEAVES Morris J Golombeck 90 bxs (0 lbs)

(Argonaul) Alexandria, 11/1.
STANNOUS OCTOATE Interateb Chemicals 35 dms (20879 lbs) (Britta Thien) Rotterdam, 10/30.
SULFAMETHAZINE Faivine Intil 180 dms (23016 lbs) Constanza, 11/5. METHYL CELLULOSE Jecasa 20 pkg (2425 lbs) (George

Washington) Tokyo, 11/4.

ETHYL-PENTENE POLYMER Mitsul 500 bgs (22707 lbs) (Hanjin Yokohama) Kobe, 10/31.

IONOSODIUM GLUTAMATE Alinomoto 1880 bgs (395508 lbs) (Lloyd Atlantico) Santos, 11/1

Exim Line 1915 mix (155845 lbs) (Hanjin Yokohama) (George Washington) Kobe, 11/4.
TALC Altransport 2 ctn (773 lbs0 (Strathconon) LeHavre,

10/23 FELLURIUM FLAKES Minpeco 72 cyl (7441 ibs) Kolke)

Calleo, 11/7.

TITANIUM COIL RMI 3 cs (7431 lbs) (Barber Perseus)
Yokohama, 11/1.

TITANIUM DIOXIDE Dorseit & Jackson 7040 bgs (353092 lbs) (Sea Land Developer) Rotterdam, 10/31.

Huxley Raw Material 750 bgs (39590 lbs) (Britta Thien)
Hamburg, 10/30

SCM 4400 bgs (227264 lbs) (Sea Land Developer) Rotterdam, 10/31.

TRICHLOROSOCYANURIC ACID 750 dms (238097 lbs)
(Kurobe Maru I Nagova, 10/25.

(Kurobe Maru) Nagoya, 10/25. [RICHLOROTRIFLUORMETHANE 1 (nk (39683 lbs) (Strathconon) Rotterdam, 10/23.
TRIFLUOROACETIC ACID IFP Enterprises 24 dms

(12610 lbs) (Express) Fos. 10/27.

IRIMETHYLOLPROPANE Leschaco 1 lnk (42020 lbs)
(Koln Express) Rotterdem. 10/21.

IRIMETHYLPHENOL 1 lnk (38228 lbs) (Rosario) Bremer-

haven, 10/30. TRIPHENYL PHOSPHATE Moneanto 1280 bgs (73546 lbs) (Rosario) Fell×stowe, 10/30.

ULTRAMARINE BLUE Hilton Davis Chemical 400 bgs (22597 lbs) (Strathconon) Rotterdam, 10/23. 800 bgs (45194 lbs) (Rosarlo) Rotterdam, 10/30 VANILLA BEANS 73 or 1 (23843 lbs) (Express) Fos, 10/27. VITAMINS Rhone Poulenc 54 dms (27818 lbs) (Strath-conon) LeHavre, 10/23. Rhone Poulenc 5 plt (5666 lbs) (Rosano) LeHavre, 10/ 30

30 ZINC STEARATE Roehilg Fwdg 250 bgs (11519 lbs) (Pi-lar) Rarcelona . 10/31.

Silicones Get Nod

Continued from Page 7

petroleum and specialty chemical industries. The worldwide market for these heat transfer fluids is currently said to be between \$2 million and \$5 million per year, but substantial growth opportunities lie in retrofits, where companies are currently using alternative fluid systems.

The overall market for silicone fluids has been growing at about 12 percent per year. pushed by high growth areas such as electronics, where silicone fluids are replacing PCB's in transformers.

Growth in the heat transfer fluids segment in currently flat, because of lower capital construction rates and crude oil costs but Dow-Corning is optimistic about the market's future.

As Gary McIntyre, heat transfer technical specialist for Dow Corning, explains, "The trend toward energy conservation, despite currently soft oil prices is an interesting one.

Energy conservation has become a regional concern throughout the US. For example, while energy is relatively abundant on the West Coast, on the East Coast, concern about the long term supply of nuclear energy has focused greater attention on cogeneration, waste incineration and other forms of 'in house' energy conservation."

ENVIRONMENTAL AWARENESS

Increased environmental awareness is anther major trend. Leaks of organic heat transfer fluids into process site materials or into the atmosphere at production sites can result in costly clean up and disposal. Higher safety standards in the chemical industry and the worker's right-to-know-laws are also focusing greater attention on these issues.

Mr. McIntyre states that silicone heat transfer fluids offer a disctint environmental advantage in tht they contain no biphenyl or eromatic compounds

"They are currently the only heat transfer luids recognized as being non-toxic with regard to oral ingestion and dermal absorption. s well as not being irritating to eyes or skin,"

The major application for "Syltherm" 800 will be in the high temperature heat transfer. As Peter W. Lewis, product manager for "Syltherm 800" explains, "Industry trends in batch production and cogeneration are contributing to the high temperature market." Unlike organics, which coke at tempera-

tures above 600°F, silicones are non-coking and resist thermal degradation. Equipment fouling, process interruption and contamination, often found with organic liquids, are not a problem with silicone fluids; unlike molten salts, also used in high temperature applications, silicones are easy to handle. The salts tend to solidify at 350°F and are often strong oxidizers.

Potential opportunities for silicone fluids exist in low-temperatures single fluid systems, targeted for the pharmaceutical industry, where low temperature ensures better reaction control:

CHEMICAL MARKETING REPORTER

December 8, 1986

CHEMICAL PRICES

WEEK ENDING DECEMBER 5, 1986

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

An index of weekly chemical market reports is on the back cover.

			Alumina, activated, gran., 100-lb. bgs		
A			40,000-jb. min. c.l., works. jo calcined, bulk, same basis to		
			100-lb. bgs., same basis to	л 380.00	
			hydrated, white, bulk, same by		
			100-lb. bgs., same basis to	n 224.00	
Abieselba.dmskilo	24.00	27.00	Aluminum acctate, basic, dms., i.c.i worksit		
Acotaldehyde, 99%, tanks, frt. alld. lb. Prices tc. higher in West.	.37	-	Aluminum chloride, anhyd., soin., 500)-	
Acctaminophen (see N-Acetyl-p-aminoph	henol)		600 lb. dms., c.l., t.l., works		
vorksb.	1.29	_	bulk, aame baalslk)48	
cetic acid, tech., tanks, dwd. E lb.	25	-	semi-buk bins, same basis it Aluminum chloride, comi., soin., 32		
lcelicanhydride, tanks, divd. EIb. Acelicanhydride prices Ic. higher in W	.43½ (ast	-	tanks, works 100 lbs	s. 15.00	
Acetoacetaniilde, dms., t.l., divd lb.	1.29	-	rot. dms., c.l., works 100 lbs non-ret. dms., same basis . 100 lbs		
.l.i ,.emb ,ebibisine-o-lessores-	2.70	_	Atuminum iormate, dibasio, ilq. 89 Al ₂ O ₂ t.i., works il		
Acetoacet-o-chioroaniilde, dms., t.i.,	2 05		Aluminum hydrate (see Alumina, hydr	eted)	
dvdb. Acetoscel-o-toluidide, dms., t.l.,	2.85	-	Aluminum hydroxide, dried, gel, NF 75-b, dms., c.l., t.l., works. it		•
dvdlb. Acetoscet-m-xyildide, dms., t.i.,	1.58	-	Aluminummetal, 99 1/2% or more, 50-lt).	•
anva	3.33	-	pigs., 30,000-ib. lota, fri alid	i. o76	
Acelone, tanks, divd. E lb. divd. Zone 2 (Calif.) lb.	.25 .27	-	i Aluminum oxide emorphous (see Alur	nina, calcinec	d).
divd. Zone 3 (W. of Rockles exclud-			Aluminum paste, feating grade std.,lining, 2,400 /b. lots).	
ing Catif.)	.27 .53	.5412	divd	. 1.40	
Acetophenetidin (see Phenacetin).	-=-		Aluminum phenoisutionate, purif., 100)-	4
workslb.	.78	.85	kilo dme., t.l	o 6.48	
perfume grade, extra, cns	2.15	-	Pining, 2,400 to tota, divd R	o. 3.17	
workskito	5.95	6.64	extra fina, lining, same basis it Aluminum stearate, bgs., c i it	ı. 1.25	
Acetylene black, imp., 50% com- pressed, 12%-lb. bgs. c.i., i.i.			Aluminum sulfate, comi., grd., 100 lt).	
irt.extrab.	.96	-	bgs., c.i., works, int. equald basis 17% Al ₂ O ₃ East and Gu	άŤ	
100%, 25-lb. bgs., same ba- alsb.	.95%	_	Coasts to West Coast 10	n 205.00	
Acetylene tetrabromide, tanks, f.o.b. workslb.	.97	_	ilq., tanks, N.E. same basis to	n 145.00	
Acetylselcylic acid, USP (see Asolrin). Acetyltributyl chrate, bulk, f.o.b.			iron-free, dry, bgs., c.i. sem basis	n 300.00	
WORKSID.	1.28	_	ilq., tenks, same basis to	n 225.00	28
Acetyltriethyl citrate, bulk, f.o.b. worksb.	2.08		Aluminum sulfate, USP, gran., dms. t Aminoacetic acid, USP, dms., 20,00	o –	.33
Acrolein, tech., tanks, works	62	=	ibs., f.o.b. works itech , t.i., same besis	o. 2.12	
Acrylamide, solid, t.l. works	1.00 .74	.77) ρ-Aminobenzolo acid, 1,000 kilos (or .	
Acrylic acid, glacial, reg., tanks, dvdib.	.67		more, dms., f.o.b. works . ki 2-Amino-4-chiorophenoi dry and gro		1
tech., tanks, frt, elid	.60	Ξ	14,000 lbs. or more, frt. sild. if Aminoethyl ethenolamine, tanks, fr	b. 5.79	
Acrylonitrie, tanks, works, lb. Acrylonitrie-butadiene-styrene resin,	.391/2	.451/2	collect	b. 1.33%	4
high-impact, nat. 11, dms.,	4.00	4.40	N-Aminoethyl piperszine, tanks, f.o.t)., b. 1. 05	
medum-impact, nat., same basis lb.	1.09 1.05	1.12 1.08	2-Amino-2-ethyl-1,3-propanedi dms.,t.l. f.o.b. worksi	o)	
low-impact nat, same basis	.98	1.01	and in the state of	b. 1.82	
cars, irr. equald	.57	-			
ogs., LL, Cl. m. equald	.59	-			
dmslb. Ncohol, syn. C-8 to C-10, tanks, Lo.b.	9.50	9.85		7 6	•
works. Ib. C-12 to C-13, tanks, dvd Ib.	.38	-			
C-14 to C-15, tanks, divd b.	.57 .57	.59 -			• 1
C-16 to C-18, tenks, ctvd lb. Ndehyde, C-6, dms lb.	.60 4.10	5.70			
C-7, dms	1.95	-	THE TERMINOLOGY	OF TH	EC
C-8. dms	4.30 4.30	6.30 5.35	a/alpha .	Marke -	_
Algin (see Sodium alginate.) Alkah blue, dry, flushed, 110-lb. dms,		-100	alid./allowed	:./Centigrade bys./carboy	8 8
divdlb.	3.72	3.83	AMP/American metting	.c./cubic cer	niime
Rockies.			Point Point	D/complete atured	
Alispice Guatemalan / Honduran,			AOAC/Association of	i.f./cost ingu freight	uran
Jamakan bos	. <u>92</u> 1.05	-	Official Agricultural Chemists	.L/carload	
Affyl alcohol, tanks, f.o.b., Bayport,	-	-	e.p.a./avaflable phos-	na./cana :oml./comme	a role
Texib. Allyl bromide, 500-kilo dma. 2,000 lbs.	.90	-	#PD/OX./Approximately	ono./concer	ntrek
or more, worka	5.50 3.90	4 50	Britt/Americal	p/chemicali ps./centipol	aes.
Aliyi chiqida, lanks, f.q.b. works lb	.65	4.50	ely for Testing &	iyal /crystal	llhe
Mylisothicyanata, bots	5.40 de.)	6.90	Materials	:tna./cartons	
Almond oil, nat. bitter, NF J.f.p.a.	· ·		11	yla.)cylinde:	
botsb.	3.50 1.24	3.80 1.50	b/bete Be/Beume	i-/dextro	
Aloe, Cape, cs	2.00	_	bbla./barrele	elduob\.ldi	
Curaceo, kgs	2.25 2.60	2.75 _	būs./bags	ienat /denat lest - dist /de	ured Betm
powd kgs	3.00 6.00	6.70	bis./bales bots./bottles	tiyely distil	lled
Num, ammonium, loch, gran, bgs.,		_	b-p-/boiling point	il/dextro-tee list/distilled	1
Cl., t.l., works 100 fb. FCC powd., fiber dms., works100 fbs.	35.00 55.00	-	of time	ilatr./distribu ilvd./deliver	utor
Num. potassium, tech. gran. bos., c.l., t I., works 100 lbs.			b.r./boiling range	me./drums	
FCC powd. fiber dms., works. 100 lbs.	35.00 55.00	Ξ.	1	lom./domest	tic
					-

	2-Amino-2-methyl-1-propanol, 95%,		
	dms., c.l., t.l., f.o.b. works . ib.	.95 .89	1 1
_	o-Aminophenol, dme., f.o.b. Charlotte, N.C	3.95	-
0	i n-Aminophenoi, t.i. dM8 f.0.0	7.15	_
	Paleigh, N.C. kilo p-Aminosalicylio acid, USP, 50-kilo	18.60	_
VI	dms., t.t	10.00	
	nais ton tankcars, f.o.b. Guif Coast ton	165.00	170.00
	BOUGOUS 29.4% NH ₃ , annyo, dass.	80.00	85.00
of	tanks, frt. equald. E. of Rock- leston		315.00
ed	Ammoniacai liquor (see Ammonia, aquec Ammoniacae), galvanizing grade, bgs		
ote	c.i., f.o.b. works 100lbs Ammoniac sal, white (see Ammonium ch	28.60 lorkie comi	.).
ns	Ammonium biborate, gran., dms., c.i. works	.90	-
ra Ì	Ammorium biborate powder 15c. per it Ammorium bicarbonate, 300-lb. fib.	o. higher.	
of	dms., c.l., works 100 lbs. bgs., c.l 100 lbs.	26.00 25.00	-
All	Ammonium bichromate, photo-fitho grade, gran. 100-lb. dms., i.t.l.	25.00	
	worksb.	2.00	-
-	Ammonium bifluoride, bgs., t.i., worksb.	.70	-
	Ammonium bromkie, dom. NF, gran., dms., c.l., t.l., f.o.b. works . b.	1.31	-
عيبنت	Ammonium chloride, white, tech., fine gran., bgs., c.i., works100bs.		
_	I USP. oran dms	18.00 . 4 0	.53
-	Ammonium citrate, dibasic, 250-lb. dms.f.o.b. workslb.	2.79	_ '
-	Ammonium dimolybdate, approx. 85%, 24,000 bs. or more . ib.	5.48	
-	Ammonium fluoborate, tech., dms., c.l., t.l., works, frt. equald lb.	1.79	_
-	Ammonium heptamolybdate, cryst., dms., 24,000 lbs. f.o.b.		
	works	5.67	-
-	workslb	.29	.32
-	Ammonium lignin, suifonate, bulk, f.o.b. Hoquiam, Ore ton	72.00	-
-	Ammonium nitrate, dom., fertilizer grade, 33.5% N, bulk, S.E.		
-	Ammonium oxalate, tech., fine. gran.	130.00	135.00
-	300-lb, dms., t.l., f.o.b, workslb.	1.42	1.68
3.50	Ammonium pentaborate gran. ogs	.75	_
	Ammonium pentaborate powder 20c. per lb. higher.		
-	Ammonium persulfate, 225-lb. dms, 24,000 lbs. or more, f.o.b.		
	workslb. 55-lb bgs., same basislb.	.58 .561⁄2	-
2.14	Ammonium phosphate (see Di- and n phates).		nium phos-
2.19	Ammonium silicofluoride, dms. c.l., t.l., works	.30%	_
-	Ammonium sulfate, ig. gran., bulk, c.l., works. ton	80.00	n 00
-	atd., comi., bulk, f.o.b. works ton	80.00	90.00 70.00
1.36	tech., bgs., c.l., t.l., works ton Ammonium sulfide, iq., 40-44% tanks,	108.00	120.00
	100% basis, irt. equaldton. Ammonium sulfocyanide, tech. (see Am	460.00 monlum thi	ocyanate).
=	Ammonium thiocyanate, tech., cryst., bgs., c.l., works	1.02	_
-	tech soln., 50%, tanks, frt.	.93	~
35.00	Ammonium thiosulfate, photographic, 60%, tanks, f.o.b. works ib.	.13	-
37	Ammonium zirconyl carbonate, soin., bulkb.	.72	_
2	Amyl scetate, primary mixed isomers, tanks, divd b.	.57	_
10.10	tanks, frt, alid.	.481/2	
_	Amyt cinnamic atdehyde, dma b. p-tert-Amylphenol, bulk, works b	2.35 .91	2.50
_	Amyris oil, dms	11.00	1.03
-	USP, dms. ib. Angelica root oil, bots. kilo	10.20 3.66	4.60
_	Anuine, tanks, f.o.b	700.00 .33	.351/2
	i Anise oil, drnskilo	8.90	-

	BB				
ΔR	KK		IA I		M Z
AP				IV	
THETERM	NOLOGY O	F THE CHEN	ICAL MARKET	PLACE	

kgs./kegs i-/laovo ib./pound i.c.i../less carload i.t.i./less truckload ilq./liquid F./Fahrenheit
Le.s./free alongside
ferment./fermentation
f.l.s./free letty acid
f.l.e./free from chlorine
f.l.p.s./free from prussic acid
fib./fiber

OFFICE COMMITTEE FOR EVENING

o-/ortho ord./ordina oz./ounce

NOTE: A unit-ton is 1 percent of 2,000 pounds of the basic constituent or other stand percentage figure of the basic constituent multiplied by the unit-ton price shown Reporter gives the price of 2,000 pounds of the material.

Arise seed, Chinese, bgslb.		_					Pose
Turkish, bgslb.	1.40 1.13 1.10	-	gruft Oxide,	grd., dms., c.l. 100 lbs	31.25 30.00	<u> </u>	Bora
O-Anisidine, imp., dms., divid	4.80 2.27	5.40	pte bins, sem	100-lb. drns., C.I., Li.	' 30	- I	teci
p-Aniskline, imp., cast solid, dms., works. to flakes, same basis. to	1.90	-	Maraja Maraja	bulk, t.l., f.o.b	1.05	- \	Borax
t.l., frt. alld	2.25	-	interpretation to co	h. (see Barite and B	Manc fixe). R	l	Boric
dris., t.l., works	1.70 -3.02	-	07808, P	holeb	.5872	- 1	Boron
Antimony metal bulk, c.i., mines b.	1.35	1.39	Grus suffde (Di	KK ARIN, CHARA, CAR	460.00	_ 	Boron
alid. E. of Rockles b. Antimony trichloride, anhyd., solid, dms., t.t. works. b.	1.25	1.60	Eni Egyptian		.88	.95 .90	bul Boro
Apontor prima nydrochlonda, NF, bots.,	3.60 15.00	-	Prior Courous	lb	62.00	70.75	phe
Arabic gum, powd. bbls	2.65 1.85	2.15	Icaliana (T.)	o.b., works too refrectory grade ALO ₃ , Baltimore &) .		Bromi
spray dried b. USP grade b.	2.00	2.50	Mobile.	Ol	11.00	-	pul bul
Aromatic petroleum solvents (see petroleum, aromatic). Arsenic, crude (see Arsenicus trioxide).	Solvent.	nephiha,	SHATY WAX, DG	Meached white). 2.70	3.00	Brom
Arylid, red (see Napthol, arylid red). Arsenious trioxide, 99%, bulk, c.l.,			bricks, 10	U-10. CUM	3.05	3.20 3.10	Brom
1.0.0. warehouse(b. Asbestine (see Talc. fibrous).	.42	.45	A Jan clotte	100-lb. ctns lb 100-lb. ctns lb	. 6.83	3.10 3.05	Butad
Ascorbic acid, USP, 100 kilos, divdkib. Ash, black (see Barium sulfide).	11.00		T	cil bags, f.o.b to dms.,	n 43.30	<u> </u>	1,4-E
Asphalt gilsonite, (see Gilsonite). Asphalt petroleum cutback, tanks, E.				t.l. lib er fb. higher West o	J/3	.83	Buten n-But
Coastgal, emulsion, tanka, tankwagons, E.	.86	-	the Rockie	85. printration, barges, 9	f.o.b.		n-But
coastgal.	.68	•	Baton Roug Bartown, T	ye, La ga ex ga	92 L .92	-	3ec-8
tenks, tenkwagon ton steep roofing grade, bulk tankwag- onton	170.00 175.00	•	(attettsbur)	Texga g.Kyga	l92	-	tert-B
Aspirin, USP, cryst., powd., 250- lb.dms.c.l.,f.o.blb.	1.95	•	Chocolate E	ıkrictga Bayou, Texga Lga	J92		Butyl Butyl
10% starch granulation, white, 250- ib. dm. c.l., f.o.b ib.	1.97		Corpus Chr	isti, Tex ga Tex ga	192	-	Butyl
16% starch granulation, white, same basis	2.80		Houston dis	abict spot ga	98	- }	Butyl n-But
Freight equald, shipt, identical quantity from N.Y., Phila., Midland, MidLouis,	over sian ch., Chica	go and St dend louter	Wood Rive	r, 19ga vide, 99% gamma k	92	indane).	Buty
Atropine sulfate, USP, bots oz. Avocado oli, dris	10.00 4.00	11.00 4.50	iq., contain	powd., ogš., divd. k ers, divd it). 3.36	8.70 3.89	n∙But n-Bul
Azelaic acid, tech., 50-lb. bgs., t.i., c.i., divdlb.	1.23	-	MOA.bgs., c	AAA, bgs., divd R Svd). 7.35	6.05 7.40	
Azo orange, bbis., divd	7.00	9.50	krazane,USP,	tvo	3,	6 20	tan
Rockles	8.95 6.85	-	brasilydropyro	rkskg one.dmsk i, ögs., c.l., t.l., f.o.b	5. 12.50	11.50	Buty
8ISIb.	0.03		Marks	ton lots same ba-	i55	.58	Butyl Butyl
			יייי או אל בבק יייי או		o. 1.80	1.75	tan p-teri
			70re i o	N.F., 1,000 lbs. c	3.50	3.60	Butyl Butyl
			E 1900 K	rmore, f.o.b ko ika or more, fo kg:	b	-	Butyl
Bacitracin, USP, non-sterile, one billion units or more million units	6.30	6 60	235 toffiazyi (de)	disulfide (see Mer	capiobenzo	hlazyi disul-	Butyl
Barbital, NF, 50-kilo dms., divd kilo Barbital-sodium, NF, 50-kilo dms.	22.60	•	3 avrizole, fig.	e. dms., 1,000 lb:	h 610	_]	tert-E
divdklio Berite, dry-grd., Southern, off-color.	23.00	.11	Fvd. dms.,	, 1,000 lbs. or mon	9, 620 h 620	-	tan Bulyi
coarse, bgs., c.l., f.o.b. mines ib. water-grd., white. bgs., c.l.,	.09 .13	."	6 MOCH RAY	dms., 1,000 lbs. o nebasia	. 000	-	Butyl
f.o.b. works	160.00	-	3) Tal Bonsi		b87	-	tec 1,3-E
Barlum carbonate, precip., bulk, c.l., works, frt. equald ib.	.25		137 pt sound	MS., C.I., Works	b57	.59	Buty:
bgs., same basisib. photo grade, bgs., same basis ton	.25W 510.00	' :	10,000-8	ou, regular gran			Buty
Berlum chlorate, 100-lb. dms., 1-10 dm. lots, workslb.	1.04	-	≥2 50% gr	1. equald	b. 2.35	6.98	n-Bu lar
Barium chloride, tech., cryst., bgs., c.l., workston anhyd. drums c.l., same basis, ton	470.00 590.00	:		is, in equald		1.95 1.25	
Barium chroride, purif., cyrst. 400-lb. dms., works	3.76	-	tris same	hasio	b. 1.26	1.85 1.43	
Barlum monohydrate, 55-lb. bgs., Q.l., t.i. f.o.b. works 100 lbs.	46.00	-	59	iri una., same b	A-	-	
octahydrate, cryst., bgs., same	33.00	-	M. grada. II	GOOD COMMITTEE	1.34	= .	Cadr
Barium nitrate, 100-lb. bgs., t.l., works100 lbs.	32.50	-	47 Obritanaha	basis ding. fech., non-ret. ding	1.26	_ 2.25	Cadi
			Stripp CT-1T'U	n. equald	9., b59	-	
			1 ** WN N-d	melbulomine	0. 8.60	9.95	lig me
	•	. [omete.c	ing.	b. 2.30 b. 10.50	-	Cadi
		النا	E-Micaugenc	A dime.	b. 16.50	30l). _	Caci
<u> </u>			a Zildra sani		b. 2.90	3.25	Cad
o-/ortho secs/secon	rde.	_ (Managed		ID 4476	3.25	m
ord./ordinary sp.g./specific	reug 10 Areans		Denvisee Dig	minoic acid (see b-C gma. or more g vienyl).	m. 5.00	5.50	Cad
P/phosphorus soin./soiluid	n rd	l	p drag	. puns. cryst., 10 Int.equald.	ID. 10.00		Cad
Pac./Pacific syn./synthet	00	,	KATON SERVICE (Masie Hon	s., lb. 17.20	_	Cad
phos./phosphate test./technochoto/photographic test./technochotographic	(Cen	1	anpda power 5	25-b. dona., works.	ib. 15.31	15.60	Çad
pkgs./packages t.l./rucklose	a Sehori (or	, [PACHET COLUMN	orks	ib. b. 10.50	-	d
precip./precipitated of 2,000 P	THE YOUR		- June 1	Cylete puels	ip. 14,40	-	Cad
pt./point tary allow puly./pulygrized t.w./tankwa	Boug	· 1	- mul09	featent course an	. 17.00	-	l m
purif./purified usp/United redist./redistified usp/united	States	·	Cars div	poxy grada, hopp d.	fb. 15,00 er	15.45	m
rety./refinery w _{e./viscosit}	w	. 1	Select Service	grada, same basis Mo., barre	b 71	=	Cad
ret./returnstrie g painters	,		District and 4	Braz dima. 8) dima (re alla	b. 6.75	- 8.05	Cad
SD/specially denatured s.d./single distilled	house house	: \	DE 189 CASS	sains basis.	b. 6.50		Caf
sec./secondary w.w./water		rial The	4 . Zavidh	9. Obligation	CONTRACTOR	190.00 Deliuorinated	In
basic constituent or other standard of the standard of the standard of the standard in Chair the standard in Chair the standard in Chair the standard of the s	miçei Me	HINNE S	THE BOTH AN	precip. (see Calciu hyd. 995	ım phosphat	e tribasio).	Cate

	ويعرب المنازع والمنازع			
I	Borax, tech., gran., decahydrate, 99½% bgs., c.l., works ton 2	237.00		Ca
l	tech., pentahydrate, grap 9016%.	92.00	-	Св
l	bulk, c.l., works ton 2	265.00 220.00	-	
Ì	Boric acid, tech., gran., 99,9%, bos.	mq.Qq	_	
I	C.I., Works	314.00 569.00	-	
l	boron trichloride, CP, 1,800-lb, cyls.,	3.80	_	Ca
l	BOTON MILLIANGE, 60-lb. CVIs., t.l., f.a.h.	4.03	-	Ca
Ì	works	3.47	- 1	
l	dms., t.l., f.o.b., workslb. phenolate, 500-lb. dms., t.l., same	2.35	-	Ca
l	basis ib. Bromine, drns . t I., works ib.	1.65	-	١
l	bulk, 45,000-lb. min., works lb.	.87 .33	.341/2	
Ì	puzit., t.l., divd	.75 ipped W. of	Rockies,	Ct
I	1c per-lb. higher. Bulk t.t. prices higher for 30,000-lb. min. and	i ic. (o 2½ 4c. to 5½	aper-lb. cper-lb.	
l	Bromochloromelhane, dms., c.l., f.o.b.			
I	Midland	1.12 .121⁄2	.13	
Ì	1,4-Butanediol, tanks, f.o.b., frt. equald	.80	-	_
	dms., same basis ib. Butene-1, tanks, f.o.b. works ib.	.86 .26	_ .28	Ca
	n-Butyl acetate, syn., tanks, frt. alid. lb. n-Butyl acrylate, tanks, frt. alid. E., . ib.	.52½ .69	_	Ca
	n-Butyl alcohol, syn., ferment, tanks, frt. alld	.34	-	Cı
1	sec-Butyl alcohol, syn., tanks, divd. ib. tert-Butyl alcohol, syn., tanks, divd.	.385	- '	
	Eib. Butyl aldehyde (see Butyra'dehyde)	.70	-	C
	Bulyi benzyi phthalate, tanks, frt.	.59	_	GC
	alidib. Butyl chloride, tanks, worksib. Butyl cyclohexyl phthalate, tanks,	.99	1.00	
	divd	.74 1.85	_ '	C
	Butyl isodecyl phthalate, tanks,	.35	_	С
	divdib. n-Buty/tectate, tanks, f.o.b. works . ib. n-Butyllithium, 15% soin., 1,000-ib.	1.58	-	C
	lots or more, cvis., 100%	15.45	_	c
	basis, divd	14.75	_	c
	Butyl methacrylate, tanks, (rt. equaldb.	.88	_	
	Butyl octyl phthalate, tanks, divd.		.42	
	E	.40 .70 .60	.82 .75	c
i	p-tert-Butylphenol, tanks works lb. Butyl phthalate (see Dibutyl phthalate).	.70		
	Butyl stearate cosmetic, dms., 77 dms. or more	.91	.97	d L
	tanks	.92 .60	62	d
	lankslb. Butylanıne (see Mono- Di- and Tributylan	.55 nine).	58	ď
	tert-Bulylamine, dms., c.l., t.l., i.o.b. worksb.	1.31	_	l
	tanks, same basis	1.17	-	6
	drns., divd	8.80	8.85	l
	grades, c.l., t.l., bgs., divdlb. tech., bgs., c.l., t.l., divdlb.	1.27 1.25	1.40 1.38	l c
	1,3-Butylene glycol, tanks, dlvdlb. Butyraldehyde, tanks, dlvdlb.	.72 .29√2	.38	l
	Butyric acid, tanks, frt. alid ib. Butyric ether (see Ethyr butyrate).	.4472	-	١
	Butyrolactone,tanks, f.o.b. plant lb. n-Butyronitrile, dms . c.l., divd lb.	1.20 .93	Ξ	
	tanks, divd	.54	_	
				۱,
			الماسيي	
	Cadmium chlorida, purif. cryst., 100- lb. dms., t.l., works lb.	3.73	-	١٥
	Cadmium, CP, red, dark shade, bbis., 100-lb. lots, frt. alld., E. of			9
	Rockies ib. light shedo, bbis., same basis ib.	11.33 9.16	18.35 12.08	
	modium shade, bbis., same basie.m. medium-light shade, bbis., same ba-	10.89	15.20	ľ
	cadmium, CP yellow, all shades, bbls.,	10.26	14.50	
	100-lb. lots, frt. aad., E. of Bockles	6.10	7.07	٦
	Cadmium fluoborate, ilq. conc., dms., t.t., works, frt. squaidlb.	2.27	-	١٩
	medium-light shade, bbls., same ba-	3.22	-	١ç
	Bhade, bbls., frt. alid. E. of			
	Codmium metal innote or sticks, 100	4.80	-	19
	iote, ca., divdb. Cadmium nitrate, purif., flake 400-lb. dms., c.l., l.f., Lo.b. ship. pt.lb.	1,20	1.50	19
		2,10	-	۱۹
	light shade, obts., 400-to. rots.	3.97	4.00	١,
	deep shede, bbis., same basis ib.	4.47	4.50	
	Shade, bbls., same basis ib.	6.77 5.27	6.80 6.30	18
	medium light shade, bbis., same ba-	5.72	5.76	1
	medium shade, bols., same basis. b.	6.37 7.47	8,40	
	Cadmium-salarida ithopone, yelicw. 85.	2.97	3.00	1,
	Cadmium sulfate, 50-tb. dms., any quantity, f.o.b. ship, pt lb. Caffeins, dom., USP, syn. cryst. and the country of the	4.05	·· <u>-</u> ;	T
	Caffeine dom, USP, svn, cryst, an-			1.

ľ	Cafelum carbide, std., generator size, bulk, c.l., f.o.b., works, ton	402.00				
ľ	Cercium carbonate, pulverized, 325- mesh, bos., bulk f.o.b.	102.00	_	VICTUR		
ļ	workston alumas, 54% solida, same	46.00	- 1	CHEMIC		L
l	72% solida, same basis ton	97.00 109.27	100.00			_
L	quickime, gran., Ind., bulk, work-	100.93	_	PRICES		
	works	.0B30	.1800	LUIAFA		
1	d.t.l	385.00	445.00	WEEK ENDING DEC 5, 19	86	
ľ	Calcium carbonate precip. medium, bgs., c.l., works ton	110.00	150.00	Carbon black, low structure, bulk, c.i.		
	precip. dense. bgs., c.l., surface treated, bgs., c.l., works ton	285.00	- }	worksb.	.240 .270	.260 .290
ļ	ultrafine, USP, bgs., cJ.,workston Calcium chloride, conc., reg. grade. 77-	217.00	225.00	Intermediate-auper-abrasion (ISAF)b.	.26	_
ļ	80%, flake, bulk, c.l., workston	153.00	_	bgs., c.l. worksb. super-abrasion (SAF), bulk, c.l.,	.28	-
l	100-lb. bgs., c.t., same	196.00	_	works	.31 .4050	Ξ
1	anhyd., 94-97%, flake or pellet, bulk, c.l., same basis ton	217.00	_	works	.210 .240	-
١	60-b. bgs., c.t., same basis ton brining grade, 60-b, bags ton	279.00 285.00	-	Carbon black, thermal, medium, bgs. c.i., worksb.	.30	.301/
l	Calcium chloride, iiq., 100 percent ba- sis, t.c., t.i., barge ton	99.75	-	bulk, c.l. works	.32	.34%
l	45% same basis ton Calcium chloride, USP, gran., 225-lb.	118.00	-	f.o.b. W. coast refineries bbls.		12.50 12.50
ļ	dma., t.l., frt. equald lb. Calctum citrate, purif., 200-lb. dms., 10,000 lbs. or more, f.o.b.	.90	-	Carbon tetrachloride, CP, consumers, dms., c.l., (n. alid b.	.36	_
ı	works	3.82	-	tech., dms., c.l., t.l., frt. alid lb tank transport (mkn. 4,000 gais.)	.31	-
ĺ	dms., works ton Calcium gluconate, USP powd. t.i lb.	400.00 1.80	450.00	frt. alid	.24	-
l	Calcium hydride, lump, dms., 25- 1,000-lb. iots. works lb.	10.50	13.25	Cardamomoli, NF, bots	80.00 2.90 5.75	_ 7.50
ł	Calcium hypochlorite, 100-lb, dma., truckloads ship,t. E. of Rock-	.0.55		Camilne, No. 40, NF, bulk, 100-lb, tota		40.00
l	les	92.40	-	Carnauba wax, Parnahyba, No 1, yel- low, bgs., ton lots ib.	1 95	2.05
l	500 kilos or more kilo Calcium iodale, FCC dms., (.o.b.	13.75	14.50	Ceara, No. 1. yellow, bgs., ton lotslb.	1 75	1.90
l	works	5.50	-	North Country, No. 2, refined, bgs., toniots	1 55	1.65
	workskilo	23.85	25.65	centrifuged, bgs., ton lots . ib North Country, No. 3, refined, bgs.,	1.10	-
ŀ	drate, dms., 24,000 lbs. or more, f.o.b. works lb. NF, gran., trihydrate, same basis. lb.	2.00 2.10	-	toniots	1.30	1.45
ł	special gran., dried grade, same ba- sis	2.80	_	mesh, 20c. per ib. higher. b-Carotene, in vegetable oil, semi- solid		
ł	Calcium naphthenate, liq., 4% Ca., c.l., f.o.b. plant, E. of Rockies lb.		_	suspension, 400,000 A units per gram., 33 lbs. or morelb. b-Carotens, lig. in vegetable oil.	32.75	-
ı	d-Calcium pantothenate, USP, 100- 500-kilo lota kilo		-	500,000 A units per gram., 33	40.75	_
ļ	di-Calcium pantothenate, feed grade, f o b frt. alid , 250 kilos or			b-Carotene, dry, beads, 10%, 167,000 A units per gram 50-lb, cns. lb	26.85	-
1	more		8 50	1-Carvone	48.00 7.00	7 25
1	ride complex, feed grade, 160 grams per ib., f.o.b., irt. alid. 600 lbs or more ib		_	Cascara sagrada bark, bulklb. Casen, imp., acid-precip, grd., 30- mesh, Australian, edible.	1.00	•
	Calcium phosphate, dibasic, feed grade, 18½% P. bulk, C.I., t I.	ı	_	same basis.c.l.f	1 45	-
i	f.o.b. works tor Calcium phosphata, dibasic, dihydrate,	228.00	-	c.if	1 385	-
1	USP, bgs., c.l., t.l., works, frt.	62.50	_	alid., 100% basis	3 70 1 08	1.20
1	anhyd., USP, same basis. 100 lbs dentifice grade, same basis60 lbs	. 49.90	-	B' bgs	18 50 .32	.34
1	Calcium phosphate, monobasic monohydrate, food grade bgs., c.i., t.i., works, irt			USP 5-9 dms	.74 .78	-
ł	equald	. 50.50	-	blown, 5-9 dms	75 74	-
]	sis	. 54.95	-	dehydrated, unbodied, tanks	65 1.10 .79/2	- .83
1	equald	. 62.50 ·	-	Castor pomace, bgs., container load,	154 00	_
	or more f.o.b. frt. alld lb. Calcium silicate, hydrated, bgs., c.i.		.55	Castoreum, nat., cns lb. syn., cns lb.	18.00 11.00	35 00
۱	works. Ib Calchim silicate, paint grade (see Wolli Calomel, NF, mild powd., 100-lb. dms.	astonite).	_	Catachol, CP, 45-kilo dms., 50-239 dms., f.o.b	7.93 3.71	-
۱	f.o.b. works	. 8.50	-).	Caustic potash (see Potash, caustic). Caustic soda (see Soda, caustic).	3.71	
١	Camphor, monobromated, dms.	3.63	3.70	Cedarleaf oil, dmsb. Cedarwood oil, Texas, dms., cnslb.	17.50 1.75	2.50
1	Camphor, syn., tech., 165-lb. dms. 5,000 lbs. or more fb	1.80	-	Cedroi, prime dmsib.	4.75 5.25 4.25	- 5.30
Ì	USP, powd., 165-to. dms., 5,000 ib. lots or more	. 2.36	-	Cedryl ecetate, dist., dms	.46 37.00	-
١	ib. lots or more	. 3.50	Ξ	Cellulose scetate, powd., bgs., tl., divd. Eb.	1.30	-
١	white, dms	. 2.00 . 2.65	2.85	Cellulose acetate butyrate, powd., 17% butyl content, bgs., Ll.,	1.76	
١	Cananga oil, Indonesian, dms kiki Candellia wax, crude, bos) 17.50), 1.90	=	divd. Eib. 38% butryl content, bgs., divd. E ib. 50% butryl content, bgs., divd. E ib.	1.59 1.81	:
	ratd. pure, bgs	00	.65 .65	55% bullyl content, bgs., divd. E lb. Cellulose gum, pure, high vis., bgs.,	1.63	-
	tank6	T	6.35	24,000-fb, lots or more works, f.o.b. Hopewell, Vab.	1.60	1.70
	Caprolactam monomer, flake, bgs., t.l. f.o.b. shipping point lb	•	_	aid., low or medium vis., bgs., c.l., LL, f.o.b. Hopewell, Va b.	1.60 1.35	1.90
	mojten, tarks, same basis	85	-	Cerium concentrate CeO ₂ , 50 lbsb. Cerium hydroxide 90% CeO ₂ , dms., worksb.	5.40	
Į	(,o.b. worksic Caprylic acid, comit. pure tanksib	00		77% CeO ₂ dans., worksb.	4.20	1.60
	Capalcum (see Pepper, red). Capalcum oil (see Capalcum oileoresin	r .		tb. lots or more, divd	1.85 .681/2	1.90 1.27
:	Capacoum observers, NF, from dom peoper, dms	11.00	•	Chaik (see Calcium carbonata). Chamornile flowers, Hungarian, cs, b. Roman, cs	4.25 4.94	4.50
	500,000 pungency	I. 17.UU	18.00	Egyptian, whole	2.70 545.00	3.00
	Caraway oil, Poland, dms	. 22.00	_	Chennoodkim oil, NF, cos	370.90 15.00 13.60	· · · -
	Egyptian, bg8			Chicago acid, dry, bbis., frt, alfd lb. Chilles (see Pepper, red). Chlorendic anhydride, tach., dms., t.i.,	13.50	-
,	(FEF), buit, o.l., works	. 24	25 -	works	1.30	-
٠.	Works:	23	76 -:	50% chlorine, same basia ib.	.46 .46	.41 .41 .41
	high abrasion (HAF), high structure		00 -	60% chlorine, same basis lb 70% chlorine, realnous, 50-lb.	.464	

					_
			CMC, technical, 96% minimum, low or medium vis., bgs., 24,000 lbs.,		
CHEMIC		M I	f.o.b. Hopewell, Va., 100% basis	1.25	-
	7 '	\L !	detergent makers, f.o.b. manufec-	.64	_
			turing pointib. CMC, purif., high vis., (see Cellulose gu		255.00
DDIFES	_	l	Coalter pitch, Indust., Iq., works .ton. roofing, 140–155, Federal specifica-	200.00	230.00
PRIVES	•	- 1	ilon RP-381 Type 1, bulk workston	350.00	_
	<u> </u>		Cobalt acetate, dms., t.J., frt. alid ib. Cobalt carbonate, powd., dms., frt.	3.61	4.25
WEEK ENDING DEC 5,	1986		alidb. Cobait chloride, dms., 5,000 lbs. or	6.61	8.16
Chlorinated paraffin, Zone 2 prices an	1c. per lb	. higher and	more, ft. equald	4.15 6.20	- 10.55
Zone 3 prices are 2c per lb. hig are 6c per lb. higher	her end t.l.	drum prices	Cobalt metal, 99.5-99.9%, 250-kilo dms., f.o.b. NY, Chicago lb.	11,70	_
Chlorinated rubber, 5, 10, 20 cps., bgs, t.l., divd	1.66	_	Cobalt naphtnenate, liq., 6% Co.,	2.06	
40 cps, bgs., t.l., dlvd lb. 125 cps., bgs., t.l., dlvd lb.	1.92 2.60	-	dms., dlvd	2.74	3.45
300 cps , bgs., t.f., divd	2.75	-	Cobalt oxide, imp., black, 72-73%	9.61	-
Chlorine tanks single units works, i.o.b., frt. equald ton	195.00	200.00	Cobalt oxide, imp., 70-71% Co (b. Cobalt phosphate powd. 32.1% Co.,	9.78	-
Chloroscetic sciol mono high purity, flake, 99% bulk (.o.b.			dms., divd	1.35	-
worksib. 2-Chioro-4-aminotoluene, tech., fig.,	.56	•	dmsib. Cobalt sufate, cryst., bgs., 10,000 fbs.	.381⁄2	-
dms., c.l., (.l., f.o.b. works . lb. o-Chlorosniine, fiquid, dms., c.l., f.o.b.	1.88	-	or more, irt. alid. E ib. monohydrate, dms., irt. alid ib.	2.81 4.5 6	3.54 6.02
workslb. tanks, same basisb.	1.63 1.65	· -	Cobalt inlate, 6% Co., cms., divd to.	2.16	-
p-Chioreaniane, solid, c.l., t.l., f.o.b. lb., flake, dms., c.l., same basis lb.,	1.70 2.00	_	Cociliana bark, bis	.40 2.05	.45 -
o-Chiorobenzeldehyde, dms., t.l., works	2.45		Coconut oil (See Oils, Fats & Waxes may Coconut oil acids, distilled, i.c.,	rket report.)).
p-Chlorobenzaldehyde, dms., 2,000			f.o.b	.52 .54	.58 .63
ibs. or more, works ib. o-Chlorobenzoic acid, dms. Lt I. wks ib.	3.84 3.90	3.85	Cod oil, f.o.b., Gloucester, Mass., bulkgal.	6.50	_
p-Chlorobenzolo acid, drns., 500-lb. lots or more, workslb.	1.69	2.25	Codelne alkaloid, NF, 25-kilo lots, .kilo. Codelne phosphate, USP, cns., 25-kilo	900.00	-
Chloroform, tech. tanks, distr. divd ib. tech., consumors, tanks, divd ib.	.34½ .34½	Ξ	kotsklo	640.00	-
NF tanks, min., consumer, 4,000 gals. divd	.351/2	_	Codeine sulfate, NF cns., 25-kilo kdskilo	775.00	7 0-
2-Chloro-4-nitronniline, paste, com- modity basis, dms., t.l.,	.,		Codiver oil, NF, dms	8.50 1.50	7.25 -
f.o.b	3.06 3.15	-	Copalba oil, cns., dms	3.75	•
4-Chloro-2-nitroamine, paste, 172.5 mol. wt., commodity basis,			lech., drns., t.l., works lb. Copper bromide, (cupric) 200-lb. dms.,	.71	.74
dris., t l., f.o.b lb. powd , same boss; lb	2.25 2.70	_	100,000-lbsper-year con- tracts, works	1.34	_
o-Chlorophenol, dms., c.l., frt.			Copper carbonate, 55% Cu. dark, dense, 50-lb. bgs., c.l., t.l.,		
p-Chlorophenol, dms., c.l., frt.	2.00	2.40	works 100 lbs. light, liully, 60 lb. bags, c.t., t.l.,	108 30	-
equald	1.25	1.70	works 100 ibs. Copper chloride (cupric), anhyd., c.t.,	109.30	-
f.o.b. works	1.25	-	worksib.	.90	-
p-Chlorotoluene, tech., tanks,	.1812	-	Copper cyanide, tech. dms., 24,000- ib.lots or moreib.	2.30	2.62
works	1.00	- '	Copper fluoborate, (cupric), tiq. conc., dms., t.l., works, trt.		
per gram. kdo lots gm Chofine bitartrate, cryst., 98% min., 50	24 00	- '	equaldib. Copper gluconete, FCC grade, 25-lb.	.82	-
kilo dms , f.o.b. Springtiold, Mokilo	6.90	_	dm., frt. equaldib. Copper metal electrolytic wire bars.	6.50	-
Choime chloride, feed grade, 70% aqueous, 1.0, 1.1, divd E of	0.00		civd. domestic, basis ib. Copper raphthenate, liq., 8% Cu.,	.62 <i>V</i> 2	-
Rockles	.28 .39	-	dms., irt. alid(b. Copper nitrate (cupric), purif., flake,	1.19	-
Chaine chloride, 60% dry supplement,		-	dms., i.i., works	.4314	-
bulk hopper cars lb. bgs., 50,000 lbs. min lb	.39 .40	-	works frt alidib. Copper oxide, black (cupric), dms.	.97	-
Choline chloride, pharmaceubcal, 50 kilo, lols, 1.o b Springfield,			80,000-ib. iola, worka ib.	1.21	-
Mo. kilo. Chokne d hydrogen otrate, 98% min.	5.00	-	red (cuprous), dms., 97%, USN Type 1, (AA), 80,000-lb. lots,		
50 kilo lots. 1 a b. Springfield, Mokilo	6.00	-	workslb. red, 90%, Type 2, same basislb.	1.19 1.15	1.20
Give E. of Rockies ib.	1.68	_	Copper-8-quinolinolate, 10%, liq- emulaion, t.l., divd	2.52	
light bgs , same basis	1.70 1.72	-	Copper suifate, cryst., pentahydrate, 99% bgs., c.i., f.o.b.		
extra deep, CP., same basisib Chrome orange, CP, bos., divd. E. of	1.74	-	works 100 lbs CP, peniahydrate, cryst., dms., l.c.i.	46.45	-
Hockies	.83	.69	works 100 lbs. monohydrated, 35% Cu, dms., c.l.,	60.00	-
Chrome yellow CP bbls, divd. E. of Reckles	1.09	1.18	works 100 bs. basic, bgs., c.l., works 100 bs.	75.10 88.30	-
ord . same basis	1.18 1.25	<u>-</u>	Coriander oil, USP, dms	32.00	34.00
Chromium aceate, soin., 713%, dms., 500-2,000-lb, lots, works Ro.	.10	_	Rumanian	.36 .38	.37
Chromium Huoride, dms., 1.f., works	.10	_	Compil. crude. foots (Bospstock), 95%		
Chromamnitrate, dms , (.l., f.o.b., .fb. 10% metal soin , 500-lb, dms, same	1.45	Ξ	acid, New York	.131/2 .50	.14 -
basis	.74	.86	Corn syrup 43 Be., tanks, f.a.b.	.32	.40
Dgs .c.iib.	5.50		Works	11.22	11.43
pure, bgs , c l	1.90 1.85	2.00 1.95	or more gram. Cottonseed meal (See Oils, Fata & Ways	.80 m texheon #	anort)
Cinnamic alcohol, 25-lb. cns lb. Cinnamon, H2 lb. Cinnamon had all hade	4.50 .95	1.00	Cottonseed oil (See Oils, Fats & Waxes) Cottonseed oil, activulated (soap)	market repo	xt.)
Cinnamon bark oil, bots ib. Cinnamon leaf oil, dans ib.	105.00 2.75	110.00	stock), acid, 95%, tanks, N.Y	10	
Citral, nat , dms	5.50 3.18	6.65	Cottonseed oil acids, dist., dms ib. tanks ib.	.13 .63	-
Citric acid. USP, hydrous, gran., 250- b. dms , I J., ib.	1.19	_	Coursein, NF X, cryst., over 600-lb.	.55	•
Citric acid, USP, anhyd , gran, 250-lb.	.86	_	Cream of targer (608 Polassium hitarira)	6.00 e).	6.20
Citro acid antiyde, powder bc. nigher Citronella oi, Java, dms. Ib China, dms. Ib	2.60	_	Creosote, coaltar, grade 1, tanks, f.o.b. works gal.	1.15	1.18
Citroneital, 25-lb carrs lb.	260 385	7.40	p-Cresidine, fused, drus., works in	1.134 4.31	1.17
Citronellol drums, f.o.b	3 68 5.50	6.50	tanks, same basis	1.71 1.65	-
Citronelly formate, 25 fb cns b. Creet. artif . bots b.	6.85 20 00	-	m.p-Cresol, 99%, dms , t.l., f.o b,lb. bulk, same basis	.94 .82	-
Clay ball, dom, air floated, box, c.t.	400.00	-	o-Cresol, 99% pure, dms., tl., f.o.b. lb. bulk, same basis	.87 .75	Ξ
dom crushed, moisture-repel-	49.00	-	bulk same bacie	.87	-
leni, butk, C I., Tenn ton Clay Chris (see Kaolin).	24.00	-	D-Cresol, 98%, drns., t3., f.o.b b.	.75 1.22	-
Cleaners, naphtha, 140° llash tanks., New Jersey or New York.			Cresync ecid, coalier, dom., melanera	.95	1.15
dirdgal. Clove lost of Indonosian, reg. dms. kilo	1.40 3.15	Ξ :	content above 25%, resin and tricresyl phosphate grades,	1	
Madagascar, reg kilo Clove bud oxi kilo	3.40 25.00	28.00	Cresylic acid, dom, metapara content	.58	-
Ctoves, Brazil 85. Zanzibar 10.	2 30 2 30 2 30	-	25% of less, tanks, frt, atd, ib. Crotonic scid, 200-lb, dres, til, fra b	.68	-
Madagascar	2.30	=	Cryolite syn., bulk, c.l., works ton	1.60 510.00	550.00
98 CHEMIOAL M	ARKET	INGREE	ORTER (Distantina	<u> </u>	

	Cubercot, powd., 5% rotenone, basis, 50-lb, bgs., t.l., works lb.	.60	_	Diethyl car
_	Cumene, bulk, contract, f.o.b ib. Cumin seed, Indian, bgs ib.	.14½ .95	.1434 -	Diethyl etha divd
_	Iranian, bgsb. Cyanuric acid, dms., c.i., i.i. frt.	.99	-	tanks, divo Diethyl etha
255.00	equald	1.16	1.37	Diethyl oxa work
	hyde content, dms lb. 96.5%., dms lb.	4.85 7.35	9.20	Diethyl phtha odorless
4.25	90-92%, drns	7.85 1.04025	1.05025	Diethyl sulfai
8.16	Cyclohexanol tech., tanks, 1.o.b b. Cyclohexanone tech., tanks, 1.o.b.	.52	.661/2	Diethyl thir work Di-2-ethylher
_ 10 EE	worksib.	.55½ .565	.58V2 -	Diethyl tolua
10.55	Cyclohexylamine, tech., tanks, worksb.	.85		worl N,N-Diethyl
_				dms tenks
3.45				Diethylamine tanks, san
-				N,N-Diethyla work tanks sam
-				Diethylbenze
-	2,4-D acid, tech., 50-lb. bgs., c.i., t.i., works, frt. equaldb.	1.10	1.25	Di-2-ethythe: Diethylene gi
3.54 6.02	2,4-D butyl ester, tech., 55-gal, dms., c.l., t.l., works, irt. equald (b.	1.30 1.25	-	Diethylene dms
.45	tanks, same basis	8.05	_	tanks, irt. Diethylene
i.).	Decyl alcohol, mixed isomers, tanks, divd	.32	_	tanks, frt.
.58	perfume grade, dmslb. Defluorinated phosphate (tricalcium),	.75	-	Diethylene g dms tanks, frt.
.63	feed grade, 18% P, c.l., bulk, f.o.b. works ton	195.00	228.00	Diethylene g
-	Denatured alcohot, ethyl, CD18, CD19, tanks, divd, E gal.	1.87	_	tanks, divo
-	NOTE: Tankcar sales require written as and Tobacco Tax Division.	ıthorization	by Alcohol	etal tanks, frt.
7.25	Denatured alcohol, ethyl, SO2B, tanks, divd. Egal.	1.81	_	Diethylene wor
-	SD3A, tanks, dlvd. E gal. SD23A, tanks, dlvd. E gal.	1.76½ 1.86	-	Diethylenetr P
.74	SD23H,tanks, divd, E gal. SD29, tanks, divd, E	1.89 1.83	-	tank equi Digitoxin, US
	SD30, tanks, divd Egal. SD35A, tanks, divd Egal. Denatured alcohol, ethyl, brucine formula	1.72½ 1.88½	=	Diglycol laura Diglycol stea
-	SD40, tanks, dvd. E gal. ethyl, optional formula, SD40, tanks,	1.83	-	Dihydrazine Dihydrostrer
-	divd. Egal. For anhyd. alcohol on above formulae.	1.82½ prices are 1	- 2c. oer del.	Dihydroxyi wor
-	higher. West Coast divd. prices are the san			Ol-Isobutyl k Di-Isobutyl p
-	except in Idaho, Oregon and W differential on tankcars is maint	ashington v aired.	where a 5c.	Di-Isobutyle ton
2.62	Desoxyephedrine hydrochloride (See i drochloride)	Methamphe	itamine hy-	Di-isodecyi p Di-isononyi p Di-iso-octyl a
-	Detergent alkylate, straight chain do- decylbenzene, tanks, barges			Di-Iso-octyl p O:-Isopropai
-	f.o.b	.45 28.04	-	alid. tanks, san
: -	cl.,works	27.43	-	Di-isopropyle tanks, san
-	Dextrose, anhyd., coml., bgs., c.l., divd. New York 100 lbs.	41.10	_	Dilauryi 3,3-t
-	USP special, 100-lb. bgs., c.i., dlvd. New York 100 lbs.	46.50	_	Dill oil, USP. Dimethyl ant
-	Dextrose, hydrated comi, bgs., c.i., divd. New York 100 lbs.	24.25	_	Dimethyl be lb. d Dimethyl ca
-	Western zone 100 lbs. Discatone alcohol, acetone free,	25.60	-	wor Dimethyl dic
1.20	tanks, divd	.52 9.25	15.00	gøl. Dimethyl eth
-	min. 18% N, 46% P. bulk, c.t., t.o.b. Fla. works	140.00	145.00	tanks, d
	Diammonium phosphate, feed grade, 18% N, 20% P, bulk, c.l., f.o.b.	140.00	140.00	Dimethyl ett divid Dimethyl p
-	Fia. workston	240.00 250.00	<u>-</u>	Wor Dimethyl 8
_	C.I., t.I., works, frt			wor Dimethyl sul
34.00	equald	52.50	-	wor tanks,
.37	sis	57.75	-	Dimethyl sul Dimethyl sul
	dms., c.l., t.l., works lb. tanks, works lb. Diarylide yellow, OT, (yellow 14), dms.,	1.04 .97	=	Dimethylace Dimethylami
14 - 40	fri. alidib. o-Dianialdine dihydrochloride, 100%,	7.00	8.00	equ 40% soln. bas
11.43	MW 244, dms., t.l., divd ib. 2,6-DHert-Butyl-p-Cresol (see Butylate	4.25 d hydroxyld	- (eneul	enhyd., te N,N-Dimethy
_	works	.77	.85	t.l. dms N,N-Dimethy
report.) sort.)	Olbutyl maleate tanks, f.o.b. works. Ib. Dibutyl phthalate, tanks, works Ib. Dibutyl sebacate tanks, works Ib.	.83 .54	.64 .60	tanks, san
_ '	Dibutylamine, dms., c.l., divd ib. tanks, same basis	1.72 1.12 1.06	1.89	2,4-Dinitroar Dinitroaniline dive
-	2-5-Dichioroaniline, flake, dms.,	2.00	_	2,4-Dinitrock
6.20	3.4-Dichloroaniline, tech, 88%, solkt.	1.80	-	N.C 2,4-Dinitropi
	o-Dichforobenzene, jech., 60%, drze.	1.46	1.57	Cha Dinitrotoluer
1.18 1.17	c.l., t.l., divdib. tanks, same basisib.	.52 .45	-	wor 2,4-Dinitrot wor
	98% refd., dms., c.l., seme ba- sls lb. tanks, same basis lb. p-Dichlorobenzena, graded, 300-lb.	.54 .47	= '	tanks, wo
-	tanks, fig., same beds	.51 .43	.52 47	Dioctyl szele Dioctyl phthy
-	10.000 the or more works its	9 20	.47 _	Dioctyl sebi wor
-	Dicyclohexylamine, dms., cl., tl.	2.30	-	1,4-Dioxene t.i., same
1.15	tanks, same basis	1.35 1.25	-	Dipentaeryti E Dipentene s
	divd	1.25	<u>.</u> ·	Fig.
- '	98%, tanks, works ib. Diethanolamine, tanks, to allo	-35	-	Dip oli (see T Diphennydra
-	iri. alid.	.34 .41	.36	don dive
550.00	DDVP (see Dimethyl dichlorovinyl phosp Diethyl barbituric acid (see Barbital).	hate).	. - .	Diphenyi, wor Lanks, wo
	-1 nd mim/i			. unines, WO

carbonate, tankwagons, .o.b.works	4.45	_	yanterda, lech. grade, tanks . ib.	1.11	1.20	Epinephrine base, syn., USP, bots., 100-gram lotsgram	20
ivanoismine, CP dms., c.i.,	1.40	-	Maria III.	1.25 1.00	-	Epoxyresin, liquid, bulk tanks, divd. lb. Solid, bgs., ti. b	.60 1.31 1.28
ilhanolamine tech. Ro postb	1.18	-	rosal, lanks, works whiteled, lighe, bgs., t.l., 1.0.b.	7.68	_	Epsom salt (see Magnesium sulfate). Erythorbic acid, powd., gran., 100 ib.	1.20
vorke.	1.80		yorks. 	2.52		dms., t.l. or mixed t.l. (o.b.	4.10
SS COSMETIC GRADE + 1	.69	.86	n-unihydantoin-sodium USP.	5.00	5.60	Ester gum, gum-rosin type, dms., c.f., dlvd , lli., Md., Kv., E. Siates.	
liate tanks for all to be	.97½ .59	- 1	remember 4.4 di laccyanate.			Minneapolis, N.C., Ohio, St Louis, St. Paul, Va. W. Va. In	. 75
thiourea, dms., c.i., i.i.,	2.48		ald the standard ID	.91 .45	-	Ester gum, wood-rosin type, dms., c.l., same basis	.43
ihexyl adipate (see Dioctyl adipa pluamide, 95-97% min, meta somer, dms, t.l., f.o.b.	ate).	_	(197) and all all of the lib.	.54	-	Ethyl acetate, syn., 85-88%, tanks, divd	.41
hydra. Ib. hyl-m-toluldine, tech., liq.	2.75	_	prior seme basis.	.46 2.92	-	99%, tanks, divd	.41 1.13
)ms., c.i., f.o.b jb. 1ks. same basis	3.18 3.10		M BIG. tech solid dms.	3.11	_	Ethyl acrylate, tanks, frt alld ib. Ethyl alcohol, syn., 190 pf., USP tax	1.05 66
nne, ams., c.l., divd., b.	1.15 1.02	-	1), fr. alid	.64 .61	.65 .65	free, tanks, divd. E gal. Ethyl alcohol, absolute, 200 pf., tax fre	1.55 a pric
vorksh	1.83	•	ואס פרעטון וויים באום אווים וויים וו	2.75	2.60	than 190 pf., tax free. Ethyl alcohol, fermentation, tanks.	
ame basis. .nzene, tanks, f.o.b. works ib. ihexyl azelate (see Dioctyl azela	1.75 .98	-	ond 100% basis	3.00 .76½	2.70	f.o.b. works	1.06 tex in
hexyl phthalate (see Dioctyl ph e glycol, tanks, divd. Eib.	thelate).		Mental success annyones. uns.,	.88	-	Ethyl alcohol, denat. (see Denatured alcoh Ethyl p-aminobenzoate, NF (see Benzocal Ethyl benzoate, dmsb.	noi, etn Ine). 1.35
te glycol monobutyl ether, ims., c.l., irt. alid. E lb.	.29% .65	Jih	http://demonstrate.com/pare/pare/pare/pare/pare/pare/pare/pare	, .48	.53	frt. alid. E	.76
irt ald E	.57	-	ha coetar, certified colors for rood,			Ethyl bulyrate, dms	1.35
ims., c.l., frt. alld. E	.64 .58	:	andover, frt. prepaid or and.	21.20	22.60	bgs., t.l., frt. equald. E lb. standard vis., 10, 20, 45, 100 cps.,	4.55
e glycol monomethyl ether, ima.,c.l., frt. alld lb. frt. alld lb.	.62		to 2	29.15 49.50	29.22 65.00	t.i., frt. equeld. E ib. medium vis., 50, 70, 100 cps., ti., frt. equald. E ib.	4.17
e glycol monobutyl ether ac-	.54 en	•	MARING No. 3 ID.	24.00 7.45	24.50 7.85 6.75	USP vis., 7 cps bgs., t.l., frt. equald.	4.88
divd. E	.80 .72	-	M. Coates, certified colors for drugs and coametics. 100-lb. lots	6 .45	0.75	USP 10,20,45,100 bgs., t.f., frt.	4.56
etate, dms., c.l., frt, ello. E. ib. frt. alid	.80 .72		Grid. Brooks, No. 5	38.50		VSP (medium) 50,70,100 bgs., t.l., Frt. equald. E	4.5
netriamine, tanks, f.o.b. worksb.	1.60	1.61	10. Ib.	42.80 18.85	-	Ethyl chloride, tech., cyls., frt. alld lb. tanks, frt. alld lb.	.20
pentasodium salt solution,			vii	38.90 38.25	-	Ethyl cinnamate, dms kilo Ethyl ethanolamines, mixed, dms., t.i., divd. E	41 00
ank- cars/tanktrucks int- iqualized	.45 2.60	300	£3	12.45 59.95	-	tanks, divd. E	1.19
surate, dms., ton lois lb.	.32½ .62	.73	10.03C No.7	48.95 21.00	Ξ	Ethyl hexanoate, dms	4.2
ine sulfate, dms., worksib. treptomycin sulfate, bulk kilo.	1.10 48 00	1.25	ti	20.55 48.80 35.25	48.85	Elb. tanks divd. Elb.	6: .5
xyacetone, 50-kilo lots, workskilo	40.00	-	a mater, for general use in cloth adpaper dyeing (by Color In-	33.50	_	2-Ethylhexyl acrylate, straight or mixed, tanks, frt. alld. E lb.	.7· .3
yl ketone, tanks, divd lb. yl phthalate tanks, divd. E. lb.	60 55	57	dexitame). f.o.b. works is Bueblackex, conc lb.	5.75	_	2-Ethylhoxyl alcohol, tanks, divd lb. Ethyl lodide, cbys., works lb. Ethyl linalool, syn. 55-gal. dms lb.	6.2: 10.6
tylena, lanks, f.o.b. Hous- on	.37 40	<u>.</u>	1489 Blue 2G	5.46 19.85	-	Ethyl linalyl acetate, syn., 55-gal dms	10.8
yl phthalate, tanks, divd . ib. tyl azelate, tanks, divd E . ib.	40	197	19 WAizarine Br. Cy G lb. 19 113 Mayy 5 R lb. 19 16 Gast 2 G 3 3 3 % lb.	14.13 6.55	-	Ethyl methacrylate, tanks, frt.	1.0
tyl phihalate, tanks, divd lb. panolamine, dnis., c l., frt.	40	•	10711 Ib. 19680Ex Conc. Ib.	22.12 3.72 4.00	-	n Ethyl morpholine, dms , t l , frt. alid , lb. tanks, some basis	2.0
alld lb. same basis lb.	56\ 58\	:	1773/fool Or G. Ib.	4.30 6.15	-	n-Ethyl-a-naphthylamina, dms., works	1.9
pylamine, dms., c l. dvd . lb. same basis lb.	1 17 1.07	:	RUAIGRubine 1339. Ib.	5.13 8.85	-	Ethyl oxalate (see Diethyl oxalate). Ethyl parathion (see Parathion, ethyl).	1.0
,3-thiodipropionate, dms., t.l., rt. alid	1 89 7.00	825	1 153 Fast Red A. Conc. Ib.	5.45 6.85	-	Ethyl silicate dist (see Tetraethyl orthostil Ethyl silicate, 40% available SiO ₂ ,	cale).
anthranilate, dms	15 80	-	14758/S Conc. Ib. 14758/S Conc. Ib. 14948/S Conc. Ib.	4.50 9.75	-	dms. t.l. f.o.b. works lb. tanks, f.o.b. works lb.	1.4 1.3
b. dms	6 95	-	1 123 Tattazon Ex Conc. Ib.	12.22 5.69 6.18	-	N-Ethyl-nt-toluidine, tech., liq., dms., c.l., f o.bb. tenks, serne basislb.	3.1 3.1
vorksdichiorovinyi phosphale, 55-	90	199	Barrier Ib.	16.40 4.42	-	N-Ethyl-o-toluidine, dmslb. Ethyl vanillin 100 lb. dms., 500 lbs. or	2.6
gal, dms., f.o.b	1.80 1.15	1 18	34V-Bohite Green Courted the	9.55 6.90	-	25 lb. drns., 500 lbs. or more lb.	13.5 13.7
s.l., divd. E	1.07	1 10	77 Rhodamine B.E.	6.80 10.95	-	100 lb. dms., less than 500 lbs lb. Ethylamine (see Mono-Di- and Tri-)	14.0
ilvd	.38	•	12Bord Yet SFA 150% ID. 31 Sky Blue 6B Conc. ID. 5 Conc 300% ID.	10.10 4.62	-	N-Ethylanilino, dms., c.l., t.l., f.o.b. worksb	1.6 1.5
vorks	.65	- 263	3-22 Faul Block CD	9.25 9.45	-	tanks, same basis	.2
varks	2.48	-	30 Resin Fact Brown CDN ID	2.85 4.28	-	Ethylone, contract, divdlb.	16.0
vorks. lb.	.57 .46 .59	:	For Resin Fact Const. (D.	7.23 9.15	-	Ethylonediamino, 99%, tanks, 1.0.b.	1.3
sulfide, tanka, works ib. sulfoxide, tanks, works ib. acetamide, bulk f.o.b ib.	.78 .87%	:	REFERENCE DOOR . ID.	7.00 6.16	-	Ethylonodiamino dihydriodide lb. Ethylonediamino tetraacetic acid, te-	7.5
arnine, 25% soin., tanks, frt. squald., 100% basis	.631/2	-	in Fau Scode At	0.16 6.85		trasodium sait, soin., t.c., t.t., frt, equaldlb.	.5
oin., tanke, frt. equald., 100%	.6312	-	Li Core 1500 WSP LIQ. ID.	0.25 2.47 11.25	-	Ethyleno dibromide dms., c.l., frt., equald	.3 .3
, tanks, frt. equald lb.	5412 1.03 1.11	:	120 Taber You 3GX	4.69	_	Ethylone dichloride, tanks, 1.0.b.	.1
i	.57		Suibene Yellow GA. Ex.	1.75	•	Ethylene glycol, indust., 18hks, tri.	.5
.o.b., works	.49 1.22	:	THE FAST YELOW RGL CORG	3.03	-	Ethylene glycol, monobutyl ether, tanks, dvd. E	.4
iline, grange toner, CP, Ogs., that E of Rockies lb.	5.20	•	1 317/Rec. p	9.75 14.40	-	Ethylene glycol monoethyl ether, tanks, dvd. E	٠. ا
ochiorobenzene, crysterizmo	.98	_	781 Scarint BA 100	4.26 21.00 3.65	-	tanks, divd. E	4
N.C	1.95	-	VICTO GRA	6.84	-	etate, tanks, int. and. E ib. Ethylena glysol monoethyl ether 80-	
Charlotte, N.C	.30	.43	3726 Roydes D	3.77 7.85	-	etale, lanks, 11. 840., E 10.	
vorksib. trotoluene, dms., c.l., t.l.,	1.25 1.20	:	18127 Blue BGLF ID.	17.25 10.05	=	etale, tanks, in. aso. E ib.	nel :
worksib. worksip. fipate, tanks, frt. alid. E	61	.70 1.04	Illiano Con In	22.80 4.10	-	Ethylene trichkride (see Trichkroethyler Eucalyptol, NF, dms. Portuguese .kilo. Eucalyptus Ciriadora Oli, Chinese kilo.	
refate, tanks, divo. E	.99 .40	.45	18t250Eve TA Paste lb.	5.60 5.85	-	Eugenol, USP, dms kilo	ĩ.
ebacate, 99%, tanks, t.b.	1.47 1.13	-					
ne hecie	1.21		11				
cythritol, bgs., c.l., t.l., dvd. b. e steam-dist., tanks, 1.o.b.	1.42	.99					
la. works turpentine derived, tanks . lb.	25 25	28	in sch., 85-99%, dms., t.J lb. intre, syn. anhyd., USP . 80-es	7.00		Fannel oil, sweet, USP, cns lb.	<i>: '</i> '9.
re Tar acid Oll).	*	24.00	Tarre hwteri	1 06	_	Fennel seed, Egypt	
iom., 1,000-kilo iois, kilo	20.00	74.40	tos Senara Comp. 80-oz. Time hydrochloride, NF, cryst., bashan 1,000 kg. klib tone adha, USP cryst., dms., bashan 1,000 kg. klib	38.25	- 40.26	Ferugreek seed, Indian, bgs	
1, 99.9% bgs., c.l., t.l.,	74		I be sathen a non- cryst., drns.,			dms., c.l., works 100 bs.	36.

. 1	Ferric chloride, sewage grade, 100 per- cent basis, f.o.b. works, tank		
3v2	Ferric nitrate, cryst., dms., t.i., (o.b.)	176.00 2 .64	55.00 -
	Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. workslb. Ferric oxides (see iron Oxides).	1.65	-
5	Ferric phosphate, FCCg insoluble pow- der, dms. 10.000 lbs	1.10	1.15
1	Ferric pyrophosphate, soluble, puril, pearls, 50-lb. dm	1.11	-
6	Gms., ton lots frt. alld b. Ferric sulfate, partly hydrated, 100-lb.	.45	-
11/2	bulk, workston	141.00 117.00	_
Ì	Ferric ammonium citrte, NF, brown, grean gran. 100 lb. dms., 2,000 lb. min., f.o.b. shipping		
	pt	2.00 /. of Denver	2.95
igher	Ferric-ammonium oxellate, fine gran., 250-b. dms., t.l., f.o.b. works.	40	
28	Eb. Ferric hydroxyethylene diaminetri- acetic acid, industrial grade,	.42	-
.	900ium sait, soin., 4.5% Fs, t.c., t.t., f.o.b. works ib.	.55	_
50	agricultural grade, sodium salt solu- tion, 5% Fe, t.c., t. 1., 1.o.b.	.64	
50	worksib, Farrous fluoborate liq. conc., dms., Lt., works, frt. equaldib.	.64	-
22	Ferrous gluconate, NF, t.l., works E.lb. Ferrous naphthenate, Iq., 6%, Fe.	2.25	-
	dms.,divdlb. Ferrous suitate, moist, bulk, t.l. f.o.b. workston	1.17 30.00	-
	heptahydrate, gran., bulk, t.l., f.o.b. works		150.00
5 9	monohydrate, gran., bulk., t.l., f.o.b. workston		180.00
281/2	USP, powd., 400-lb. dms lb. cryst., 250-lb. dms lb. Fir oil, Canada dms lb.	.49 .61 10.00	-
261/2	Siberia, dms	12.75 .29	-
	kettle-bodied, tanks lb. light, cold-pressed, dms., c.l lb.	.32 .34 .26	.36
75	tanks	.20	-
	lantic portton	295 00 290.00	:
	imp , Chilean, 65% protein min., bulk, c.l., t l., ex whse., f.o.b. Atlantic and Gulf ports lon.	285.00	_
	Fluoboric acid, dms., t l., works, frt.	.70	-
	Fluorocarbon, No. 11 bulk, tanks, delvdb. No. 12, bulk, same basislb.	57 .68	.64 74
-	No. 12, bulk, same basis lb. No. 22, bulk, same basis lb. No. 113, bulk, same basis lb	1.05	1.14 .931
-	No. 114, bulk, same basis lb Fluosificio acid (see Hydroffuositicio acid	1 02 h	1 08
-	Formaldehyde, 37% methanol free (un- inhibited) divd., guif lb. 44-45% (1% methanol) tanks,	980	.0905
	divd	.1015	
46	divd	.0945 1055	1025 .1060
-	Formarnide, tanks, f o.b	.39 44	-
90	Formic acid 90% lanks, 1.0.b. worksb. 95% dms., c.l., workslb.	.36Va .51Va	-
-	Fructose, cryst., 18,000 kilos or more, dms	.90	1.03
.50	Fumaric acid, food grade, bgs. t l., frt. equald, Eb,	.75%	.771/2
_	tech. grade, bgs., t.l., f.o.b. frt. equaldlb. Furfural, tanks, f.o.b. Gedar Rapids,		.621/2
.23	towa, and Bella Glade, Fla. lb. Furluryl sicohol, tanks, f.o.b. Memphis,	.75 70	-
.18¥ .25	Tenn. and Omaha, Neb lb.	.72	
.305 .25			
_	U		
.46 40		0.00	
.42 .1714	G sait, dms., frt. alid. 100% besla ib. Galiic acid, 400-kilo lots kilo Garlic oli, dms., Egyptian	ZQ.00	110.00
	Galetia editia 100 AOAC test, dms		

5.00	CHEMIC	Ά	
1.15	DRICES	:	_
-	r nivky		- {
- 1	WEEK ENDING DEC 5, 1	986	
<u> </u>	ومنصوب ويوسون والمساور		
2.95	Glue, bone, extracted, green, jelly- grams, bgs., c.l	.86 .78 .77 .79	:
- 1	192 jellygrams, bgs., c.t., f.o.b b. 220 jellygrams, bgs. c.l. f.o.b b.	.87 .93	-
	Glue, hide, 108 jellygrams, bgs., t.l., f.o.b lb. 135 jellygrams, bgs., t.l., f.o.b lb.	.80 .85	=
-	164 jellygrams, bgs., t.l., 1.o.b lb. 192 jellygrams, bgs , t.l., 1.o.b lb.	.90 .95	_
_ 1	222 jellygrams, bgs., t.l., f.o.b., b. 251 jellygrams, bgs., t.l., f.o.b., b.	1.00 1.05	-
l	283 jellygrams, bgs., t.l., f.o.b lb.	1.10	-
[]	315 jellygrams, bgs., t.l., f.o.b lb. 347 jellygrams, bgs., t.l., f.o.b lb.	1.15 1. 20	_
_	379 jellygrams, bgs., t.l., f.o.b lb.	1.25	-
ì	411 jeltygrams, bgs., t.l., f.o.b., lb. 444 jeltygrams, bgs., t.l., f.o.b., lb.	1.30 1.35	Ξ
- I	477 jellygrams, bgs., t.l., f.o.b., ib. Glutanic acid, 9917% dms., 100-tb.	1.40	-
50.00	kots, frt. alid kilo	6.65	-
BO.00	Glycerine, nat., refd., USP, CP 991/2% tanks, divd	.891/2	-
- }	USP, CP, nat. 96%, tanks, clivd lb. Syn. 96%, tanks clivd lb.	.8744 .894	-
-	Syn. 99.5%, tanks divd lb.	91	-
- - .36	Glycine (see Aminoacetic acid). Glyceryl gualacolate. 100-ib. Ilb dms.		
-	f.o b kilo Glycolic acid (see Hydroxyacetic scid)	14.50	-
- 1	Giyoxal 40% soln., bulk, tanks,		
- 1	divdb. Grapetruit oil. Fla., dms	.44\2 3.00	-
-	Calif., drmsib	3.00 3.00	-
	Graphite, amorph, powd., bgs. dms.		<u>.</u>
-	ex whse fb. cryst , 88-90%, powd., bgs., dms .	.16	.40
-	ex whse ib.	.30	60
.64 74	Graphite, cryst., 90-92%, powrt., bgs., dms , ex whse lb.	40	75
1.14	95-96% powd bgs., dms ex whse	.60	90
.93' / 1 08	Graphite, amorph., cryst., 97% and up.		
	whse ib Graphite, Hake, No. 1, 90-95%, bgs .	.80	1 20
.0905	dnis , ex wlise Ib	.65	75
.1065	No. 2, 90-95°s, bgs . dms . ex whse	65	75
1025	Grease (See Oils, Fots & Waxes market i Grease oil (See Lard oil)	report)	
.1060	Guaracol, tech , 500-lb dms , 24,000 b		
-	min., f o.b. Wallingford. Com lb	2 70	-
_	Guaiacwoodoli, dms	3.75	*
-	ship t.pt b	50	.75
1.03	Indust., bgs., high viscosity. c t. same basisib.	.50	.85

12				
		Li del cele dese	8.00	8 2
		Heriotropin, dms	6.00	0 Z
		Henbane leaves, bis	.55	_
		Heptane, indust., tanks, f.o.b. Beau-	100	
		mont, Tex gal.	1.07	_
		95%, Lanks, f.o.b. Houston,		
-		Texga).	1.18	-
.30		Heptanoic acid, syn., tanks, 1.o.b.	.65	_
.06	-	i-Hexadecanol, syn., tanks, f.o.b ib.	.43%	-
.00	110.00	Hexahydrophthalic anhydride, tech.		
		dms., i.i., i.o.b. works ib.	1.42	-
.50	1.75	Hexamethylenetetramine, gran. bgg.,		
.75	1.85	G), t.i., works ib.	.55	-
.85	1.95	gran. dms., c.l., t.l., works lb.	.59	-
95	2.05 2.15	pdr. bgs., c.l., t.l., worksb.	.60	-
.05 .10	2.15	powd. dms, c.l., t.l., works lb.	.63	
.10	2.35	Hexane, Indust., tanks, works gal	1.01	1.1
.30	2.45	95%, tanka, f.o.b. Houston.		
.50	265	Texgal	1.12 .50	-
).		I-Hexanol, syn., tanks, f.o.b.	.su	_
.25	-	Hexyl alcohol, mixed (somers,	.32	_
.60	-	tanksib.	.32	_
.75	-	p-Hexyl methacrylate, dms., c.l., works	.751/2	_
.00	-	Hexylene glycol, tanks, divdlb.	.50	_
.00 .00	-	Hexylresorcinol, USP, dms., 25-lb. lols	.00	
.75	-	or more, frt. ald	30.00	_
.75	_	Hometropine hydrobromide, USP, 10-		
44	6.00	100-oz, lota, bots, oz.	10.25	11.3
.95	-	Homatropine methylbromide, USP, 10-		
.60		250 oz. lots, bols oz.	9.70	10.7
.95	-	Horehound herb, blab.	.25	.2
		Hydrazine hydrate, 85%, t.t., frt.		<i>::</i> -
.00		#Md	1.54	7
.00		55-gal. dms., i.l., frt. alid fb.	1.61	-
.63 .58	.65 .58	Hydriodic sold, puril., 47%-57%, 2-		
.00	44.00	cbys., f.o.ti, works lb.	7.50	
.00		Hydrosplatyl alcohol, tech., solid.		
00.0	-	dms.,cl., f.ò.b. zone 1 lb.	,85 °	
	ei i	tanks, f.o.b. zone 1 lb.	.80	•
	٠,٠	Hydrobromia eckl, 48% dms., c.i. i.i.,	389	
.50		f.o.b		- 1
.44		Hydrochloric sold, anhyd (see Hydrogei		
		THE REAL PROPERTY OF THE PARTY	AD	1.

GHEMIOAL MARKETING REPORTER

CHEMIOAL MARKETING REPORTER

December 8, 1986

Egypt b.
Turkish (see Paimarosa cit).
Geranyl acstate, drns b.
nat., drns b.
Geranyl formate, ayn., drns b.
Geranyl formate, ayn., drns b.
Gilsonite, g.p., bulk, c.l., f.o.b. Bonanza, Utah ton selects, same basis con Cinger, Coolin, bgs. b.
Chinese b.
Ginger cit, Chinese kito holian kito b.
Geraper cleoresh, NF, bots. b.
Geraper cleoresh, NF, bots. b.
Gisuber's sait (see Sodium suitate).
Gisuber's sait (see Sodium suitate).
Gisuber's sait (see Sodium suitate).
Lo.b. works b.
tanks, same basis b. December 8, 1988

CHEMICAL
PRICES

Hydrochloric acid 20° Be teaks		
Hydrochloric acid, 20° Be, tanks, works, East ton	55.00	65.00
Midwest ton	60.00	70.00
Gulf Coast ton	57.00	. 0.20
West Coast ton	90.00	105.00
22° acd, same basis, East ton	68.00	76.00
Midwestton	66.00	70.00
Gulf Coast ton	63.50	
West Coast (on	100.00	115 00
NOTE: Prices vary and are either freig ized depending on producer as	rit copect in	eignt equ
Hydrocorlisone acetete, micronized.	- ACGINIII.	
dms., 25 kilos or more . gram.	.70	_
Hydrocortisone, alcohol, micronized.		
dms , 25 kilos or more , gram.	.70	-
Hydrofluoric acid, anhyd. (see Hydroga	n fluoride)	
Hydrolluoric acid, aquecus. 70%		•
tanks., f.o.b. frt.	43.00	
equald	40.00	
works, 30% basis ton	-	-
lanks, 100% basis, works ton	190.00	210.00
Hydrogen bromide, anhyd. cyls., extra,		
30,000-fbs., f.o.b. works ib. Hydrogen chloride, anhyd., 50-ib. cyls.,	7.00	-
c.l. works	.85	_
600-lb cv/s., c.t., same basis b.	.62	-
Hydrogen chloride, anhyd., tube trail-		-
ers, seller's trailer, min.		
100.000 lbs. a year lb.	.37	-
tubo trailers, buyer's frailer Ib.	.27	-
Hydrogen chlorido anhyd., tanks,		
works	270.00	-
Hydrogen cyankie, IIq., 99.5%, tanks,	En	
works	.50	-
C l., I.G.D., frt. equald lb.	.6875	_
Hydrogen peroxide, 35% tech., tanks,	.00.0	
works, it. equaldb.	.2325	-
50% lankcers, frt. equald lb.	.3225	-
70%, tankcars (rt. equald lb.	.45	-
Hydrogen suilide, iiq., 99.25% min.		
seller's tenks, worksib. 170 b. cylindersib.	.12	.13
Hydroquinone, photo grade, consum-	2.27	-
ers. c.f., t.f., divd	2.54	_
tech., dms. c.f., drvd	1.95	
Mytroxyacetic scid. tech., 70%, tanks		
8ele, W. Va b.	.491/2	-
Hydroxylammonium suitale, dms., t.i.,		
l.o.b b.	.83	
p-Hydroxybenzene sulfanic acid (see p-F Hydroxybutyl methylceliulose (visc.	Trendistiffor	IIC BCIO).
12,000 cps 150 b. bags, tl., cl.	•	
30,000 fb. min , divd., zone		
1	2.10	_
myoroxycitronellai dimethyl acetal,		
OMS Ib	16.55	-
p-Hydroxyd:phenylamine, dms., t.i.,	_	
f.o.b. works lb. Hydroxyctronellal,	4.10	-
natural, dms	0.40	
pure dins	9.40 13.60	-
extra grade, dins	14.80	_
syn.cims	9.50	_
FIVOROXVBIRM CONTINUES 11 ABOVE 11.	2.07	2.12
Hydroxyethyl methylcetlulose (visc. 5,000 through 45,000 cps.) 50		
5,000 through 45,000 cps.) 50		
(b. bags, I.I., cl., 30,000 lb. mn. divd , zone 1 lb.		
Hydroxypropyl methylcellulose, pre-	2.73	-
Mium U.S.P (viec 4.000		
through 15,000 50 lb bece		
through 15,000) 50 lb. bags, t L, c.l., 30,000 lb. min., divd.,		
	2.87	-
zone 1	-	
Hydroxyprogyi methylcetulose, U.S.P.		
Hydroxypropyl methylcetulose, U.S.P (visc. 50 through 100 cost 50		
Hydroxypropyl methylcetulose, U.S.P (visc. 50 through 100 cost 50		
Hydroxypropyl methylcetulosa, U.S.P (visc. 50 through 100 cps) 50 lb. bags, U., c1, 30,000 lb. mh., dvd., zone 1	2.99	-
zone 1 .lb. Hydraxpropyi methylcetulose .ll.S.P (visc. 50 through 100 cps) 50 lb. bags, ll., cl., 30,000 lb. mh., dvd., zone 1	2.99	-
Excel 1. Ib. Hydroxypropyl methylcetulose U.S.P. (visc. 50 through 100 cps) 50 Ib. bags, U., c1, 30,000 Ib. mh. Glvd, zoce 1 Ib. Hydroxypropyl methylcetulose (visc. 4,000 through 15,000 cps) 50 Ib. bags, U., c1, 30,000 Ib. L. c2, 00,000 Ib.	2.99	-
Exce 1	2.99 2.17	-
Exce 1		-
Exce 1		-
Excel at the control of the control	2.17	-
Except the second secon		-
Exnet :	2.17 2.84	-
Experiments of the description o	2.17	-
Exne 1	2.17 2.84	- - -
Exnet :	2.17 2.84	-
Exne 1	2.17 2.84	-
Exne 1	2.17 2.84	-
Exnet :	2.17 2.84	- - -
Exnet :	2.17 2.84	-
Exne 1	2.17 2.84	-
Experiments of the control of the co	2.17 2.84 3.15	
Experiments of the control of the co	2.17 2.84	4.60
Excel 1. B. Hydroxypropyl methylcetulose. U.S.P (visc. 50 through 100 cps) 50 Ib. bags, U., c.1, 30,000 lb. min. divd., zone 1. B. Hydroxypropyl methylcetulose (visc. 4,000 through 15,000 cps) 50 Ib. bags, t.I., c.1, 30,000 lb. in., divd., zone 1. Ib. Hydroxypropyl methylcetulose (visc. 50 through 100 cps) 50 lb. bags, t.I., c.1, 30,000 lb. min., divd., zone 1. Ib. 8-Hydroxyquinoline (see Oxyquinoline) Hypophosphorous acid, puril., 50% dms., c.I., works. Ib. chithammol. NF. 200-k80 dms. Ib. chithammol. NF. 200-k80 dms. Ib. chithammol. NF. 200-k80 dms. Ib.	2.17 2.84 3.15 4.25 3.00	4.60
Experiments of the control of the co	2.17 2.64 3.15	4.50
Experiments of the control of the co	2.17 2.84 3.15 4.25 3.00 25.50	Ξ
Experiments of the control of the co	2.17 2.84 3.15 4.25 3.00	- - - - - 22.00

			Iron, purif., powd., palis, 10-100-l	b		Lake C, red (oner, (red 53) bbls., frl.		
CHEMI	$oldsymbol{\wedge}$	\ !	iots	b. 1.00	-	aid		-
C FR F M C			equald	b68	.75%	drns., works	1.18	1.25
	۷ř		iron oxide, brown, syn., bgs., c.i., fi equatd		.781/2	workslb.	1.15	-
PRICES			iron oxide, metalic brown, i.e.i., bgs	i.,	.15	tech., (under 2% f.f.a.), 400-lb. dms., worksb.	1.08	113
IDDIFE			frt. equald	L.		Lard (See Olfa, Fats & Waxes market re Lard oil, No. 1, dms., c.l., f.o.b b.	port.) .34	
PRIVE	3		c.i., works			tanks, same basisib.	.28	
			syn., bgs., c.l., frt. equald II	cac		Lard oil, extra, winter-strained, dms.,	.41	_
WEEK ENDING DEC 5.	1986		iron oxida, buff, nat., dom, bgs., c.i t.i., works, light		.80	tanks, same bask	.33	-
			darklt	60	-	sis, Chicago	.43	-
Hydrochloric acid, 20° Be, tanks works, East	1 55.00	65.00	other shades, bgs., c.l., from		.65	prime, burning, tanks, same ba- sisib.	.35	_
Midwest tor Gulf Coast tor	60.00	70.00	Isatolc enhydride, bgs., f.o.b. works to Isoarnyl alcohol, 95% tanks, frt.	o. 1.40	-	NOTE: 300 Mi. rad. 1 4c. higher, exce Coast, 3c. higher.	pt Texas, 2c	., and Wes
West Coast tor	1 90.00	105.00	alidit). 1.44	1.48	Laurel leaves, Turkish	3.00	3.25
22° ackl, same basis, East tor Midwest tor	1 66.00	78.00 70.00	Isoborneol, 100 lb. dms		1.15	Laurent's acid, drums, f.o.b b. Lauric acid, comil, pura bgs., c.i ib.	3.85 .65	.71
Guif Coast tor West Coast tor	63.50	_	isobutyl acetate, solvent grade, tanks	ì,		Lauric aldehyde (aldehyde C-12). dmsb.	7.76	_
NOTE: Prices vary and are either frei	ght collect f	115 00 reight equal-	irt. alid		.48 	n-Lauryl methaczylate, dms., c.l., t.l.,		
ized depending on producer a Hydrocoriisone acetete, micronized	nd location.		fsobutyl alcohol, tanks, divdib laobutylene, 99%, tanks, f.o.b		-	worksib. Lavandin oil, Abrialis, 30-32%, dms. lb.	1.72 6.50	=
dms., 25 kilos or more . gram. Hydrocontisone, alcohol, micronized.	70	-	workslb	32	-	Lavender flowers, ord	.65 .80	.75 .90
dms , 25 kilos or more , gram.	.70	-	Isobutyl leobutyrate, tanks, t.o.b warksb	427	b –	select, bis	1.10	1.19
Hydrofluoric acid, anhyd. (see Hydroge Hydrofluoric acid, aquecus, 70%	an fluoride)		Isobutyi methacrylate, tanks, divd ib Isobutyi phenylacetate, dms ib.		3.60	40-42%, ester, cns	9.00	13.00
tanks., f.o.b. frt. equald100lbs.			isobutyi salicylate, dms, lb.	3.45	3.00	spike, Spanish, dms kilo Lead acetate, purif., flake. 400-ib.	13.00	14.00
Hydroffuosibeic acid, 15-gal. dms., t.i.,		-) Isobutyraidahyda, tach., dms., c.i., dwdib		_	dms., works lb.	.48	-
works, 30% basis ton tanks, 100% basis, works ton		210.00	tanks, divd	35		tech., flake, t.l., 400lb. dms., workslb.	.37	-
Hydrogan bromide, anhyd, cyls., extra, 30,000-fbs., f.o.b. works ib.	7.00	_	lsobutyric acid, dms., c.l., t.l., divdlb tanks, same basisb.	75	Prices	Lead blue, basic, sulfate, bbls., cl., ship,t.pt., f.o.b	.87	_
Hydrogen chloride, anhyd., 50-ib. cyls.,		_	Isobutyronitrile, drns., a l., f.o.b. works frt. collect	84	_	Lead carbonate. (see Lead white basic Lead chloride, 400-lb. dms., works. lb.		
c.l., worksb. 600-b cyls., c.l., same basisb.	.65 .62	-	tanks, same basis	.75	=	Lead dloxide, tech., powd., 200-lb.		-
Hydrogen chforide, anhyd., tube trail- ers, seller's trailer, min.			Isoeugenol, dmsb. Isoniazid.powdkilo		5.60	dms., t.l., works lb. Lead fluoborate, liq. conc., dms., t.l.,	.66	.70
190.000 lbs. a year lb.	.37	-	Isonicotinic acid, hydrazine (see Isonie:	zid).		works, frt. equald lb. Lead metal, divd lb.	.65 .28	_
tubo trailers, buyer's frailer (b. Hydrogen chlorido anhyd., tanke,	.27	-	Isononyi alcohol, dms., t. l b. Iso-octyl alcohol, tanka, divd b.	.44	-	Lead monosilicate, milled, bgs., c.l.,		_
works	270.00	-	Isophorone, tanks divo		-	f.o.b. worksb. coarse, bgs., c.l., same besisb.	.36½ .37½	Ξ
workslb.	.50	-	Jodet, III., min. iri. alid ib.	.46	-	Lead naphthenate liq., 24% Pb. dms., frt. alidb.	1.11	_
Hydrogen fluoride, anhyd., tank cars cl.,i.o.b., frt. equaldb.	.6875	i -	isophthalonitrile, bgs., t.i., works ib. isopropylacetate, tanks, divd ib.		-	Lead nitrate tech., cryst., 400-ib. dms.,		_
Hydrogen paroxide, 35% tech., tanks, works, it. equald	.2325		Isopropyl alcohol, anhyd., 99%, tanks,			L.I., works b. Lead peroxide (see Lead dioxide).	.321/2	-
50% lankcars, frt. equald fb.	.3225		ctvdgal. refd., 95%, tanks, dtvdgal.	1.31	=	Lead red, 95% Pb ₃ O ₄ , or less, bgs. c.t., works b.	.38	.381/2
70%, tankcars (rt. equaldlb. Hydrogen suifide, iiq., 99.25% min.	.45	-	refd., 91%, tanka, divd gal. (sopropyl ether, tanks, divd ib.		-	Lead red, 97% Pb ₃ O ₄ , bgs. c.i., worksb.	.381/2	
seller's tanks, worksib. 170 b. cylindersib.	.12 2.27	.13	crude, tanks, divd	37	-	L880, red, 96% Pb ₃ O ₄ , bg8., c.l., 68me		.39
Hydroquinone, photo grade, consum-		_	(sopropylamine. (see Mono-, Di- or Tri-) Isopropyl myristate, dms., t.i., E ib.	1.19	1.50	basis	.391/2 cate).	-
ers. c.l., t.t., divd ib. tech., dms. c.l., drvd ib.	2.54 1.95	Ξ	Itaconic add, retd. bgs til ib.	1.45	1.48	Lead silicochromate, bgs., c.l., works	96	
Hydroxyacetic scid, tech., 70%, tenks, Sete, W. Va	.491/2	_				Lead sulfate (see Lead, blue, basic su	ilfate and Le	ead, white
Hydroxylammonium sulfate, dms., t.l., f.o.b						basic sulfate) Lead, white, basic carbonate, bgs., c.i.,		
D-Hydroxybenzene sulfanic edid (see n-	.83 Phenoisuilo	mic acid).				frt. alldib. Lead, white, basic, slicate, bgs., c.i.,	1.30	1.40
Hydroxybutyl methylcellulose (visc. 12,000 cps.) 50 lb. bags. tl., cl.	•		V			same basisb. Lead, white, basic sulfate, bgs., c.l.,	.87	-
30,000 No. min., divd., zone	2.10					98M9 basis	.85	-
Hydroxycitronellal dimethyl acetal,		-	J acki, paste, drns., works, 100% ba-			Lecithin, edible, tech., bleached, non- rel. dms., l.c.l., works lb.	.36	_
dmslb. p-Hydroxyd phenylamine, dms., t.l.,	16.55	-	siskilo Japan wax, cs	4.75 5.50	5.60	unbleached non-ret. dms., l.c.l., same basisb.	.34	_
f.o.b. works lb. Hydroxyctronellal	4.10	-	Joloba cil, 55-gal. dms., f.o.b. Arizona producing point	30.00	40.00	edible, tech. bissched, non-ret., dms., t.l., works		_
natural, dms	9.40	-	Juniperberry oil, Italian kilo	120.00	-0.00	unblesched, non-ret., dms., t.l.,	.28	-
pure, dms	13.60 14.60	_				same basisb. Lemonoli, Argentinakilo	.26 15.00	_
syn , dms	9.50 2.07	2.12				Brazil	9.00 8.50	9.50
Hydroxyethyl methylcetulose (visc. 5,000 through 45,000 cps.) 50						italian	12.50	-
(b. bags, I.I., cl., 30,000 lb.						Lernongrass oil, Indian, dms kilo Guatemalan, dmslb.	11.25 2.25	=
m·n. divd . zone 1 lb. Hydroxypropyl methylcellulose, pre-	2.73	-				di-Leucine, drns., 1 kilo works kilo Ucorica root, whole, bis lb.	60.00 -40	90.00 .50
mlum, U.S.P. (visc. 4,000 through 15,000) 50 lb. bags,			Kaolin, water washed, fully calcinsd,			gran., bis	.70	.90
t L, c. l., 30,000 lb, min., dlvd., zone 1	0.07		bags c.l., f.o.b. Georgia ton NF pwd., colfoldal, bacteria con-	265.00	-	Lighosultonate (see under Ammonium	.95 or Sodium	ilignin sul-
mydroxyprogyl maihylcejulosa. U.S.P.	2.87	-	trolled, 50 lb. bags., 6,000 lb. lots			Lime, chemical, pabble (quicklime)		-
(visc. 50 through 100 cps) 50 b. bags, I.L. cl., 30,000 lb.			Kaolin, uncarcined. No. 1 coating, bulk.	.24		DUIK, 50,000 lbs., works, f.o.b.	39.00	45.00
man., olvol., zone 1 lb. Hydroxypropyl methylcefulose (visc.	2.99		c.i., f.o.b., Georgia ton No. 2 coating ton	75.00	-	Lime, chemical, hydrated, bulk, same basis. ton		
4.000 through 15,000 cps) 50 b. bags. t.l., c.l., 30,000 b. in.,			No. 3 coating ton No. 4 coating ton	73.00	-	OOS SAITIA haais	48.00 54.00	50.00 57.00
CDVCL. ZODIO 1	2.17	-	liller, gen,i purpose, same ba-		-	Lime, NF, purif., 100-lb. dms lb. Lime oil, dist., Mexican, dms lb.	. 6 9 5.60	-
Hydroxypropyl methylcelulose (visc. 50 through 100 cps) 50 lb.			alston delaminated water washed, uncal-	58.00	- 1	expressed, dms	6.50 17.50	<u>-</u>
dvd., zone i	2.64	_	cined paint grade 1 micron avg., same basiston	100.00		Lille sails isee Calcum		-
8-Hydroxyquinoline (see Oxyquinoline) Hypophosphorous acid, punt., 50%		_	ory-gro. autioaled soft, same he-		-	d-Limoneria, dims. kilo Linalcol ex bola de rose oil, dims. lb.	.70 6.35	.85 -
dms., c.l., worksib.	3.15	-	sis	9 25	<u> </u>	Linatool oxide, syn., 55-gal, dm	2.93 7.75	_
			No. 2, powd., bbis	1.95		Linelyl acetate ex bols de rose oil, 90- 92%, dms		04.00
				.52	.57	SVII. 160° LUU75a. CIM4 IA humbe ik	18.00	21.00
·						I broke honzonto our CC! -	3.10	-
						Linalyi canzoate, syn., 55-gal. dms. lb. Linalyi cinnamate, syn., 55-gal	3.10 8.00	
						Linalyi canzoate, syn., 55-gel. dms. lb. Linalyi cinnamate, syn., 55-gel. dmsb. Linalyi formate, syn., 55-gel. dms. b.	8.00 59.85	a_n
		ف نمایت ا				Linalyl cinnamate, syn., 55-gal. dms. lb. Linalyl cinnamate, syn., 55-gal. dms	8.00 59.85 7.75	8.50
Johthammel NF. 200-kBo dms lb. Iminodiacelic acid, 96% min., dms.	4.25	4.50				Linaly canzoate, syn., 55-gal. dms. b. Linaly! cinnamate, syn., 55-gal. dms. b. Linaly! formate, syn., 55-gal. dms. ab. Linaly! isobutyrate, syn., 55-gal. dms	8.00 59.85 7.75 6.50	8.50 6.65
iminodiacetic acid, 96% min., dms., c i., t I., works	3.00	-				Linalyl cinnamate, syn., 55-gai, dms. ib. Linalyl cinnamate, syn., 55-gai, dms. b. Linalyl formate, syn., 55-gai, dms. ib. Linalyl isobutyrate, syn., 55-gai, dms. ib. Lindene, 20% formulation, dms., divd	8.00 59.85 7.75	
Immodiacetic acid, 98% min., dms., ct., t1, works. b. b. lndole.dms. b. lnositot, 50-kito dms., 1000 kitos or	3.00 25.60	=	Lecquer diluent petroleum, 140F.			Linalyl cinnamate, syn., 55-gal. dms. ib. Linalyl cinnamate, syn., 55-gal. dms. ib. Linalyl formate, syn., 55-gal. dms. ib. Linalyl isobutyrate, syn., 55-gal. dms. ib. Lindane, 20% formulation, dms., dwd gal 99.9% tech., dms., t.l., dwd bb. Linatyl propionate, syn., 55-gal.	8.00 59.85 7.75 6.50	
Iminodiacelic acid, 98% min., dms., cl., ti., worksb. Indole, dms	3.00	- 22.00	200F. D.F., t.C., New Jersey and New York			Linaly canzoate, syr., 55-gal. dms. lb. Linaly cinnamate, syn., 55-gal. dms. b. Linaly formate, syn., 55-gal. dms. lb. Linaly I sobutyrate, syn., 55-gal. dms	8.00 59.85 7.75 6.50 13.10 6.50 7.90	6.65 - - -
Iminotiazetic acid, 98% min., dms., c. ; II., works. b. ib. indole, dms. ib. indole, dms. ib. inositot, 50-kito dms. i 100 kitos or more, f o.b. works. kito fodine, crude, dms. kito iodine USP b. ib. iodine USP ib. i	3.00 25.60 17.50	=	2001: D.F., L.C., New Jersey and New York	1.25	:	Linalyl cinnamate, syn., 55-gal. dms. ib. Linalyl cinnamate, syn., 55-gal. dms. ib. Linalyl formate, syn., 55-gal. dms. ib. Linalyl isobutyrate, syn., 55-gal. dms. ib. Lindane, 20% formulation, dms., divid. gal 99.9% tech., dms., i.l., divid. Linalyl propionate, syn., 55-gal. dms. ib. Linden flowers, with leaves, bis. ib. Without issues bis. ib.	8.00 59.85 7.75 6.50 13.10 6.50 7.90	6.55 - - - .85
Iminotiacelic acid, 98% min., dms., cl., t1, works	3.00 25.60 17.50 13.50 14.21	22.00 18.00 14.59	200F. D.F., t.C., New Jersey and New York	1.25	:	Linaly canzoate, syr., 55-gal. dms. ib. Linaly cinnamate, syn., 55-gal. dms. ib. Linaly formate, syn., 55-gal. dms. ib. Linaly Isobutyrate, syn., 55-gal. dms. ib. Lindane, 20% formulation, dms., dlvd. gal 99.9% tech., dms. t.l., dlvd. ib. Linaly propionate, syn., 55-gal. dms. ib.	8.00 59.85 7.75 6.50 13.10 6.60 7.90 .78 .90	6.55 - - - .85
Iminotiazelic acid, 98% min., dms., cl.; I.f., works	3.00 25.50 17.50 13.50 14.21	22.00 18.00	200F. D.F., L.C., New Jersey and New York	1.25 1.29 1.20	1.25	Linaly canzoate, syr., 55-gal, dms. b. Linaly clinnamate, syn., 55-gal dms. b. Linaly formate, syn., 55-gal dms. b. Linaly I sobutyrate, syn., 55-gal dms. b. Linaly I sobutyrate, syn., 55-gal dms. b. Lindane, 20% formulation, dms., dbd gal 99.9% tech. dms., i.i., dwd lb, Linaly propionate, syn., 55-gal, dms. b. Linden flowers, with leaves, bis. b. without baves, bis. b. Linseed meal (see Oils, Fats & Waxes mathiseed oil, (see Oils, Fats & Waxes mathiseed oil fatty scid, dist., dms. b. b	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report ket report	6.55 - - .85 1.15).
Iminodiacelic acid, 98% min., dms., cl., t1, works. b. Indole, dms. b. Inositol, 50-kilo dms., 1000 kilos or more, f o.b. works. kilo lodine, crude, dms. kilo lodine USP b. Indolehio/hydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. alid. kilo lodaform, NF, dms., 300-tbs., f.o b. works. b. a-lonone, dms., b.	3.00 25.50 17.50 13.50 14.21 35.00	22.00 18.00 14.59 46.00	200f. b.f., t.c., New Jersey and New York	1.25 1.29 1.20 1.12	1.25	Linaly canzoate, syr., 55-gal. dms. b. Linaly! cinnamate, syn., 55-gal. dms	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report) ket report) .60 .53	6.55 - - - .85 1.15
Iminotiacelic acid, 98% min., dms., cl., t1, works. b. Indole.dms. b. Inositol, 50-kito dms., 1000 kilos or more, f o.b. works. kito fodine, crude, dms. kito lodine, crude, dms. kito lodine USP b. Itodochiorhydroxyquin, USP, XVI 50-kio dms. 100-499 kitos, fri. alid. kilo dms. 100-499 kitos, fri. alid. kilo dorom. NF, dms., 300-lbs., f.o b. works. b. a-tonone, dms. b. b-tonone, dms. b. b-tonone, dms. b.	3.00 25.60 17.50 13.50 14.21 35.00 24.00 18.20 13.10	22.00 18.00 14.59 46.00	200F. b.f., t.c., New Jersey and New York	1.26 1.29 1.20 1.12 1.08 .62	1.25	Linaly clinnamate, syn., 55-gal. dms. b. Linaly clinnamate, syn., 55-gal. dms. b. Linaly formate, syn., 55-gal. dms. b. Linaly I sobutyrate, syn., 55-gal. dms. b. Linaly I sobutyrate, syn., 55-gal. dms. b. Lindane, 20% formulation, dms., divd. gal. dwd. gal. lindane, 20% formulation, dms., divd. b. Linaly propionate, syn., 55-gal. dms. dwd. gg. gg. gg. gg. gg. gg. gg. gg. gg. gg	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report ket report	6.55 - - .85 1.15).
Iminotiacelic acid, 98% min., dms., cl., t1, works. b. Indole dms. b. Inositol, 50-kito dms., 1000 kilos or more, f o.b. works. kilo fodine, crude, dms. kilo lodine USP b. Indole list in the lodine list	3.00 25.50 17.50 13.50 14.21 35.00 24.00 18.20 13.10 25.00	22.00 18.00 14.59 45.00	200f. b.f., t.c., New Jersey and New York	1.25 1.29 1.20 1.12 1.08		Linaly canzoate, syr., 55-gal, dms. lb. Linalyl cinnamate, syn., 55-gal, dms. b. Linalyl formate, syn., 55-gal, dms. b. Linalyl isobutyrate, syn., 55-gal, dms. ib. Lindane, 20% formulation, dms., dlvd gal 99,9% tech., dms. t.l., dlvd lb. Linalyl propionate, syn., 55-gal, dms. ib. Litharge, com, ib. powd., bgs., c.l., works. ib. Litharge, com, ib. Litharge	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report) ket report) .63 .3442 6.27	6.55 - - .85 1.15).
Iminotiacelic acid, 98% min., dms., cl., tf., vorks. b. Indole, dms. b. Inositot, 50-kito dms., 1000 kilos or more, f o.b. works. kibo lodine, crude, dms. kibo lodine, crude, dms. kibo lodine USP b. todochlorhydroxyquin, USP, XVI 50-kib dms., 100-469 kibo, fri. ald. kibo dms., 100-469 kibo, fri. ald. kibo dms., 100-469 kibo, fri. ald. kibo lodoform, NF, dms., 300-tbs., f.o. b. works. b. lonone, dms. b. lonone, dms. b. lonone, dms. b. lipacec rod, whole, ms. b. lrish moss, bleached, prime, whole. bs. fron blue, alkab-rosistant, bgs., Lc.L.	3.00 25.60 17.50 13.50 14.21 35.00 24.00 18.20 13.10 25.00	22.00 18.00 14.59 46.00	zuur. b.r., t.c., New Jersey and New York gel. Houston, Texas gel. Lacquer diluent, petroleum 200F 240F. b.r., tankcars, New York and New Jersey gel. Houston, Tex gel. Lecite add, food grade 88%, t.c., f.o.b. works b. 50%, t.c., frt. equald ib. tech., 88%, t.c., frt. equald ib. Lactose, edible, reg. bgs., c.l., works	1.26 1.29 1.20 1.12 1.08 .62		Linalyl cinnamate, syn., 55-gal. dms. b. Linalyl cinnamate, syn., 55-gal. dms. b. Linalyl comate, syn., 55-gal. dms. b. Linalyl isobutyrate, syn., 55-gal. dms. b. Linalyl isobutyrate, syn., 55-gal. dms. b. Lindene, 20% formulation, dms., dlvd gal. g 99,9% tech., dms., t.l., dlvd b. Linalyl propionate, syn., 55-gal. dms., t.l., dlvd b. Linalyl propionate, syn., 55-gal. dms., b. Linden flowers, with leaves, bis. b. Linseed meal (see Oils, Fats & Waxes ms. Linseed oil, (see Oils, Fats & Waxes ms. Linseed oil fatty scid. dist., dms. b. Lithum bromide, anhyd., dms., ton lost, cilvd. b. Soin., same basis. b. Lithum carbonate, powd., bgs., c.I., t. divd.	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report ket report ket report set .63 .3442 6.27 4.00	6.65 - - .85 1.15).
Iminodiacelic acid, 98% min., dms., cl., t1, works. b. Indole, dms. b. Inositol, 50-kilo dms., 1000 kilos or more, f o.b. works. kilo fodine, crude, dms. kilo dine USP. bb. Indoleholhydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. abd. kilo dms., 100-499 kilos, frt. abd. kilo dms., 100-499 kilos, frt. abd. kilo. Iddaform, NF, dms., 300-ibs., f.o.b. works. bb. I-lonne, dms. bb. I-lonne, dms. bb. I-lonne, dms. bb. I-lonne, dms. bb. Irish moss, bfaached, prime, whole. Bs., fron blue, afkah-rosistant, bgs., I.c.I., ton blue, roc., bos., I.c.I., ton blue.	3.00 25.50 17.50 13.50 14.21 35.00 24.00 18.20 13.10 25.00	22.00 18.00 14.59 45.00	zvur. b.r., t.c., New Jersey and New York gal. Houston, Texas gal. Lacquer diluent, petroleum 200F 240F. b.r., tankcars, New York and New Jersey gal. Houston, Tex gal. Lectic acid, lood grade 88%, t.c., f.o. b. works lb. 50%, t.c., frt. equald lb. tech. 88%, t.c., frt. equald lb. Lactose . edibie, reg. bgs., c.l., works lb. Lactose, USP, reg. dms., c.l., t.l., frt.	1.26 1.29 1.20 1.12 1.08 .62 1.03		Linalyl cinnamate, syn., 55-gal. dms. ib. Linalyl cinnamate, syn., 55-gal. dms. b. Linalyl formate, syn., 55-gal. dms. b. Linalyl sobutyrate, syn., 55-gal. dms. ib. Linalyl sobutyrate, syn., 55-gal. dms. ib. Lindane, 20% formulation, dms., dwd gal 99.9% tech., dms. ib. Linalyl proplonate, syn., 55-gal. dms. Linalyl proplonate, syn., 55-gal. dms. Linalyl proplonate, syn., 55-gal. dms. Linden flowers, with leaves, bis. ib. Linaed meal (see Oils, Fats & Waxes ms. Linseed oil, (see Oils, Fats & Waxes ms. Linseed oil fatty scid, dist., dms. ib. Lithium com, powd., bgs., c.I., works. ib. Lithium bromide, anhyd., dms., ton lots, divd. ib. soin., same basis. ib. Lithium carbonate, powd., bgs., c.I., 1.I. divd. ib. Lithium chloride, anhyd. oil ib.	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report) .60 .53 .34½ 6.27 4.00 1.60	6.65 - - .85 1.15). .67 .82 .40
Iminotiacelic acid, 98% min., dms., cl., t1, works. b. Indole dms. b. Inositol, 50-kito dms., 1000 kilos or more, f o.b. works. kito fodine, crude, dms. kito lodine tisp. bb. Inositol tisp. bb. Inositol, 50-kito dms., 1000 kilos or more, f o.b. works. kito dms., 100-499 kilos, frit. alid. kito dms., 100-499 kilos, frit. alid. kito doorm, NF, dms., 300-tbs., f.o.b. works. bb. a-tonone, dms. bb. I-ponone, dms.	3.00 25.50 17.50 13.50 14.21 35.00 24.00 18.20 13.10 25.00 .55 2.70	22.00 18.00 14.59 46.00	zuur. b.r., t.c., New Jersey and New York gel. Houston, Texas gel. Lacquer diluent, petroleum 200F 240F. b.r., tankcars, New York and New Jersey gel. Houston, Tex gel. Leojic acid, food grade 88%, t.c., f.o.b. works b. 50%, t.c., frt. equald bb. tech. 88%, t.c., frt. equald bb. Lactose, edible, reg. bgs., c.l., works bb. Lactose, USP, reg. dms., c.l., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb.	1.25 1.29 1.20 1.12 1.08 .62 1.03	. 28	Linalyl cinnamate, syn., 55-gal. dms. b. Linalyl cinnamate, syn., 55-gal. dms. b. Linalyl comate, syn., 55-gal. dms. b. Linalyl isobutyrate, syn., 55-gal. dms. b. Linalyl isobutyrate, syn., 55-gal. dms. b. Linalyl isobutyrate, syn., 55-gal. dms. b. Lindene, 20% formulation, dms., dlvd gal. g99,9% tech., dms., t.l., dlvd. Linalyl propionate, syn., 55-gal. divd bb. Linalyl propionate, syn., 55-gal. divd bb. Linalyl propionate, syn., 55-gal. divd bb. Linalyl propionate, syn., 55-gal. divd. Linalyl propionate, syn., 55-gal. divd. bi. Linalyl propionate, syn., 55-gal. divd. bi. Lithium bromide, syn., 55-gal. b. Lithium bromide, anhyd., dms., ton, lots, civd. bromide, anhyd., dms., ton, lots, civd. Lithium carbonate, powd., bgs., c.L., t.l., divd. Lithium chioride, anhyd., c.l., t.l., divd. bob., des. c.l., t.l., divd. bob., des. c.l., t.l., divd. bob., des. c.l., t.l., divd.	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report) .60 .53 .3442 6.27 4.00 1.60 3.32	6.55 - - .85 1.15). .67 .62 .40
Iminodiacelic acid, 98% min., dms., cl., t1, works. b. Indole, dms. b. Inositol, 50-kilo dms., 1000 kilos or more, f o.b. works. kilo fodine, crude, dms. kilo dine USP. bb. Indoleholhydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. abd. kilo dms., 100-499 kilos, frt. abd. kilo dms., 100-499 kilos, frt. abd. kilo. Iddaform, NF, dms., 300-ibs., f.o.b. works. bb. I-lonne, dms. bb. I-lonne, dms. bb. I-lonne, dms. bb. I-lonne, dms. bb. Irish moss, bfaached, prime, whole. Bs., fron blue, afkah-rosistant, bgs., I.c.I., ton blue, roc., bos., I.c.I., ton blue.	3.00 25.50 17.50 13.50 14.21 35.00 24.00 18.20 13.10 25.00 .55 2.70	22.00 18.00 14.59 46.00	zuur. b.r., t.c., New Jersey and New York gel. Houston, Texas gel. Lacquer diluent, petroleum 200F 240F. b.r., tankcars, New York and New Jersey gel. Houston, Tex gel. Leojic acid, food grade 88%, t.c., f.o.b. works b. 50%, t.c., frt. equald bb. tech. 88%, t.c., frt. equald bb. Lactose, edible, reg. bgs., c.l., works bb. Lactose, USP, reg. dms., c.l., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb. Lactose, USP, spray dried, bgs., t.l., frt. aquald bb.	1.20 1.20 1.12 1.08 .62 1.03 .22 .55	. 28	Linalyl cinnamate, syn., 55-gal. dms. ib. Linalyl cinnamate, syn., 55-gal. dms. b. Linalyl formate, syn., 55-gal. dms. b. Linalyl isobutyrate, syn., 55-gal. dms. ib. Linalyl isobutyrate, syn., 55-gal. dms. ib. Lindane, 20% formulation, dms., dwd gal 99.9% tech., dms. ib. Linalyl propionate, syn., 55-gal. dms. Linalyl propionate, syn., 55-gal. dms. Linalyl propionate, syn., 55-gal. dms. Linden flowers, with leaves, bis. ib. Linaed meal (see Oils, Fats & Waxes ms. Linseed oil, (see Oils, Fats & Waxes ms. Linseed oil fatty scid, dist., dms. ib. Lithium com, powd., bgs., c.I., works. ib. Lithium bromide, anhyd., dms., ton lots, divd. ib. soin., same basis. ib. Lithium carbonate, powd., bgs., c.I., Lithium chioride, anhyd. oil ib. Lithium chioride, anhyd.	8.00 59.85 7.75 6.50 13.10 6.50 7.90 .78 .90 arket report) .60 .53 .34½ 6.27 4.00 1.60	6.55 - - .85 1.15). .67 .82 .40

	Lithium budddo o'r 11 di ann							
5.70 -		23.50	trymtearesinate, fused, 31/2% Mn.	.34 h - .42 -	Methyl violet toner, tungstated, PTA, bbls., same basis ib,	4.70 5.20	Naphthol arylide red toner deep shadas, bbis	40.40
1.18 1.25 1.15 -	Lithium hynochlorite of the collection	1.93 1.07	prop 6% 7% Mn. onis.	.42 -	4.4Methylene dianiline (p.p-di- aminodiphenyl methane) crude, dms .l.l., f.o.blb.	1.75 –	2-Naphthol-3.6-disulfonic acid disortion	9.20 13.
1.08 113	divid	22.70	25 bito bgs., 50-ion care, divd.	280.00 -		O DE	1-Naphthol-5-suffonic 8-arries soid (see). o Cantall
rt.) .34	Lithium stearete bos of the start in.	3.25 1.01	Mr. https://cars. same users	245.00 - 330.00 -	Methylene chloride, tanks, 4,000 gal -	o-Priority and (11916)	Naphthylamine sulforic mixed acid (see a-Naphthylamine, tanks, f.o.b. works	e Cleve's acki).
.28	Lithol red toner, parlum dree (c)	3.09	mayesa lafata, Itq., 6% Mn, dms.,	.60 –	min., consumers, divdib. Methylpentanediol (see Haxylene glycol). Methylpenylpparatologo (see Haxylene glycol).	.35 -	1 - Naphtnylamine-5-sulfonic acid (see Li 2 - Naphtnylamine-4 & disulfonic acid (see	aurent's acid).
.41 – .33 –		3.27 _ 3.50 _	erabl comi., powd., dms., t.i.,	3.02 -	Methylphenylpryazolone (see 1 - Phenyl-3 - 5). a-Methylstyrene, f.o.b. shipping pt lb.	.44 –	Neatsfeet of, 20°F, t.l., f.o.b. works	Obias acid).
.43 –	Litsea cubeba oil dine	5.60 _ 2.50 _	Angries French	.86 .89 .61 .82	p-Methylnaphthalene, bulk, works.gal. Methylthionine chloride (see Methylene b) to	1 90	dms	47
.35 - Fexas, 2c., and West	2 4-Lutidios dos 11 4- 5- 11.	6.00 6.76 6.75	Misseyment 4 4 -di-180C	de). yanate)	Mica, dry-grd., joint cement, plastic, 50	.071/2 _	(8.0 ks, f.o.b. works lb. 40°F, dms., t.l., f.o.b. works lb.	44 - AR
3.00 3.25 3.85 -	orade 10 000 lbs dist	8.00 10.00	ETIM. DOS., CI., 11., 40,000 D.	.511/2 .591/2	dry-grd., roofing, 20 to 80 mesh. works	.07 -	Delivered prices apply on shipments of	39 within 300-miters
.65 .71		1.35 1.40	th (L.L.), same basis ib. esint-formaldehyde resin, g.p., t l. it.eld ib.	.50 .58 .55 .60	rubber, bgs., c.l., f.o.b. works ib.	.16¼ - .16¼ -	Philadelphia, Pa.; other areas, higher and West Coast 3c. high Neomycin sulfata, USP, non-sterile,	iber.
7.76 – 1.72 –	1 R.A		ompounds, same Da-	.461/2 -	walipaper, bgs., c.l., f.o.b. works. lb. Microcrystalline wax, petroleum, coat-	.22 –	dms., 50-kilo. lots, activity ba-	75.00
6.50 -			eriadenoli, crude, terrika, worka At-	.12 - .13 -	ing grades, FDA, tanks, works	.361/2 .461/2	Neopentyl glycol, sturry, 90%c.t., t.l., dlydb. powder, fiske, bgs. t.f., dlydb.	599 .
.65 .75 .80 .90 1.10 1.19	Mace, East Indian, siftings, lb.		Gilports, same basis Ib. erd, nat., USP, Brazillan large and regular crystals, apot, cs.,	.10 -	Works	.381/2 .48	perf. grade. dms	. 5.30 5.
9.00 13.00 13.00 14.00	Magnesia, tech., light, negarane.	5.40 _ 5.80 _	LICE meetic 100-450 lbs. lb.	6.50 6.75 9.00 -	65-75 vis., tanks, refy gal.	2.38 - 2.42 -	Neroli oli, Tunisian, bots	7.06
.46 -	grade, ogs., c.l., t.l., works b. Magnesia, syn., tech., chemical-	.75 .81	works, frt. alld	1.25 1.55	145-155 vis., tanks, refygal.	2.45 ~ 2.53 ~ 2,54 -	Niacinamide USP, t.I. dmskito. Niacin NF, dms 5,000 kitos or more,	. 8.00 ' ·
.37		90.00 _	one works, int. elid	1.33 1.66	200-210 vis., tanks, rely gat. 340-350 vis., tanks, refy gal.	2.56 ~ 2.65 ~	divd	o 7.50 8
.87 – bonate).	deadburned, bulk, same ba-	35.00 _ 12.00 _	100-b. dms., f.o.b. works lb. THERE order, red, purif., 100-lb. dms., Lo.b. works lb.	6.50 – 7.00 7.25	Mineral spirits, petroleum, odoriess, tanks, New Jerseygal. Houston, Texgal.	1.83 1.88 1.78 1.79	basis	
3.25 -	bgs., same basiston 46 Magnesia, nat., tech., heavy, 85%, 150	9.00 -	sch.,100-lb. dms., same ba-	5.50 7.00	Mineral spirits, petroleum, regular, tanks, New Jerseygal.	1.41 1.49	bs. to i.i., divd. Eb.). 3.45
.66 .70 .65 –		2.00 - ; 15.00 - ;	_j -5 ₄ ,NF, 100-lb. dms., same ba- st	7.00 7.25	Molybdate orange, bbls lb.	1.41 1.43 1.52 1.95	Nickel chloride, bgs., 10,000-lbs. to 11., divd. Eb. Nickel fluoborate, ltg. conc., dma., 11.,	. 1.19
.65 – .28 –	Magnesium bromkle, 80-lb. dms., hex- shydrate	2.50 -	to, 100-lb. dme., same ba- is	5.50 7.50	Molybdenum matal, com,l., powd., 99.8%, dms., works lb. 1 Molybdenum trioxide, CP, dms.,	3.60 –	divd. Eb. Nickel metal. electro cathodes, cs.	. 1.25
.36½ – .37½ –	Magnealum carbonate, light, tech., bgs., c.l., t.l., works, frt. equaldb.	.73 .78	tany, ammonisted (see White precipi	lete USP XV). .48 -	works, 24,000 lbs. or more to. tech., chemical, dms., 24,000 lbs. or	5.25 -	worksib. Nicket nitrate, dms., bgs., t.i., divd.	i. 3.45 I.
1.11 -	USP, lite bgs., c.l., same basis ib. USP, heavy, bgs., c.l., same basis ib.	.74 .60 .83 -	etanis edd, glaciai, 99%, dims., ti, fri. equald	.87 - .78 -	tech metallurgical, dms. same basis.lb.	2.65 2.85 2.65 2.85	E)-
.321/2 –	Magnesium chloride, anhyd., 92%, flake or pebble dms., c.l., worksb.	100. (6	:A: amphetamine hydrochloride, dms	12.00 18.00	Molybdic acid (See Ammonium Dimolybdate Monoammonium phosphate, fert. grade, min. 13% N. 52% P.	3)	Nickel sulfate, bgs., t.l., divd. E ib. Nicotinic acid (see Niacin).	
.38 .38 <i>V</i> 2	Magnesium chloride, hydrous, 99%, flake, bgs., c.l., workstb.	.12% .15 .14% -	##-impletamine hydrochloride, dmaib. initial, syn., barges, f.o.b.	4.50 7.00	bulk, c.l., f.o.b. Fla. workston 15	5.00 -	Nicolinamide (see Niscinamide). Nitric acid, 35° Be., 38°Be, 40°Be.	
.381⁄2 .39	Magnesium gluconate, 100-b. dms. f.o.b. works, E ib.	4.25 -	producing point, Gulf Coastgal.	.28 -	Monoammonium phosphate, tech., bgs., c.i , t.i., works, frt. equald 100 bs. 5	4.00 -	42°Be. tanks, c.l., works NF 100% basis tor 94½% to 98% HNO ₃ , tanks, works	n 195.00 s.
.39½ – 6).	Magnesium hydroxide, NF, powd., dms., c.l., t.l., works frt. equald	.78 -	₹₹### (996 Hexamethylene fetran ₹ ### hydroxyanelogue, dry, ####################################	nina). .86 –	food grade, bgs., c.l., t.l., same ba-	i9.25 -	100% basis tor o-Nitroanline, flake, dms., t.i	n 280.00 I.
.35 – te and Lead, white,	Magnesium lauryi sulfate, tanks, f.o.b. works	.22 252	ind. 88% activity, t.l. frt.	.88 -	Monobutylamine, bulk, divd	1.69 - .96 1.00	worksb molten, refd., tanks, worksb molten, tech., worksb	o. 1.44
	Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more. f.o.b. Freeport, Tex lb.	1.53 -	-\u00e4notese Recemethionine) -\u00e4notes, 50% wettable powder, detes, dms	2.05	Monochloroacetic acid, purif. (see Chloroac Monochlorobenzene, tanks, f.o.b ib. Monoethanolamine, tanks, frt. alid.	.421/2 -	o-Nitroanline, orange toner, bgs., frt slid	t. o. 1.90
1.30 1.40 .87 –		1.29 133	thatale, non-ret. dms., c.l.,	2.05 – 9.40 –	Elb. Monoathylamine, 70% aquecus tanks,	.43 .46	p-Nitroanline, dms., c.l., t l., 30,000 lb min., works	b 1.63
.85 -	ib. dms., t.l., works ib. Magnesium oxide, USP, light, bgs., c.l.,	.32 - 1.65 -	nt dms., i.c.l., same ba-		frt. prepaid, 100% basis fb. anhyd., tanks, same basis ib. Monoisopropanoiamine, dms., c.l., frt.	.94 - .92 -	Nitrobenzene, tanks, f.o.b	b33 L,
.36		1.64 -	M	10.00 - .85 -	alid. E	.76 – .66 –	f.o.b	b74
.34 –	Magnesium phosphate, tribasic, tech. 60-lb, bgs., f.o.blb.	1,00 -	*:/xoyete, tanks, divdib. *:/xoxol(eee Methenof) *:yan(alcohol, tanks, divdib.	66.00 -	Monoisopropylamine, anhyd., dms., c.i., int. prepaid ib.	.79 -	aildit Nitroethane, tanks, divd. Eit	b. 1.75 b. 2.50
.26 -	Magnesium silicate (see Talc). Magnesium silicofluoride, bgs., c.l., t.l. works	.1645 .160)	h i anthrenilete, tech. dime	.55 - .54½ -	tanks, same basisib. Monomethylamine, anhyd., tanks, con- tained basis frt, equaldb.	.78 - .64½ -	Nitrogen solutions, direct application over 32% N, and mgf. type worksunit-tor	е,
.26 – 15.00 – 9.00 –	Magnesium stearate, bulk, t.l ib. Magnesium sulfate 10% Mg. (epsom	.95 106	te/bergoate done 11	1.41 2.65 .25 -	25% soln., tanks, irt. alid. 100% basis	.57 –	direct sopilication, 19-329	%
8.50 9.50 12.50 –	salts), tech. bgs., t.l., worksib. bulk, same basis	.14 - .13 -	F, perl grade, dms., t.f ib. P, bromide, dist., tanks, 140,000 bs. min., frt. alld ib.	1.65 - .5634 -	40-60% soln., tanks, frt. equald. 100% basisib.	.631/2 –	Nitrogenous sewage sludgs, proc esso, bulk, f.o.b. Chicagounit tor	
11.25 - 2.25 - 60.00 90.00	USP, cryst., bgs., same basis . ib. USP, cryst., bulk, same basis . ib.	1312 -	400 through 4 000 peach 60 fe	.0074 _	Monopotassium glutamate, dms., 990 ib. or more, fri. alid	2.60 –	NOTE: Price is per unit NH, plus \$1, producer,s works, Chicago.	per unit a.p.a. bu
.40 .50 .70 .90	Magnesium suifate, 17% Mg, (syn- thetic monohydrate), tech.	.80 -	hegs, II., cl. 30,000 lb., min., drd, zone 1	2.73 ~	c.i., t.i., divd	.76 .80 .85 –	Nitrogenous tankage, processed, bull per unit-ton NH ₃ , f.o.b. Carro vitle, Wiscunit to	ik, Di-
.95 – r Sodium lignin sul-	Magnesium sutfate arrhydrous. CP	1.25 -	30000 to Dags, tl., cr.,	2.85 –	Monosodium phosphate (see Sodiumphosp Montan wax, crude, imp., German . lb. dom., Calif., bgs., c.l., t.l., f.o.b.	.55 .57	f.o.b. Forbes, Me unit to expanded, bulk, c.l., per unit-ton i	on 6.75 N.
	bgs., t.i., worksibs. Magnesium suifate trihydrate, tech.	1.76 .45	4,000 cps) 50 lb. bga., tl., cl.,		shipt, pt	.61 –	f.o.b. Forrestdale, R.I. unit to Nitromothane, dms., I.I., divd. E I o-Nitrophenol, dms., f.o.b. works I	lb. 2.37
39.00 45.00	bgs., t.l., works lb. Magnesium trisilicate, USP, powd., fib. dms. 5,000-lb. lols lb.	.38	bigs, it., cl., 30,000 lb.	2.24 -	Morphine alkaloid, NF, 26 k lots kilo 10' Morphine sulfate, USP, 26 k lots kilo 8' Morpholine, dms., c.l., irt. alid. E ib.	18.00 50.00 1.02	p-Nitrophenol, dris., c.l., f.o.	.b. lb. 1.05
48.00 50.00 54.00 57.00 .69	USP, micronized powd., dms., 375-lb.lotslb.	.83 - 1.62 -	Corde, indust bulk, tanks.	2.52	lanks, frt. ald., E	.94 -	2-Nitropropane, tanks, irt. alid. E	lb. 1.15
5.60 – 6.50 –	Maleic acid, cryat., powd., drums, 100	3.20 -	manale, dms	.25½ .26 heno). 4.65 -		6.00 7.00 10.75 – 3.60 –	tanks, same basis	b48 I.,
17.50 - .70 .85	drums, tons, f.o.b	2.80 - 1 .55 .59	H-/Enviserone, tenks, divd. E. Ib.	6.00 - .236 -	Musk. syn., xylol, dms	.20 -	tanks, works	þ70
.70 .85 6.35 - 2.93 - 7.75	equald	.53 - 1	771 una hast total et. dins.	3.55 3.80 .41	Canadian No. 1 Yellow lb. Orlantal No. 1 bgs lb.	.21 - .20 -	les, min. irt. alid	b49
7.75 - 18.00 21.00	Ib. bgs., t.l., c.l., dva lb. Mendado of Breztlan, dris lb. 17	7.75	larks, works ib.	.29 - .31 -	Myrcia oil (see Bay 01). Myristic acid, comi., pure, t.l., bgs fb. tanks	1.30 - 1.12 -	drochloride) Nutmeg oil, dist., East Indian, Nidma	F. Io 32.00 3
3.10 – 8.00 –		8.00 10 ⁰⁰	by neptin carbonale cime	14.50 - 7.30 - 45.00 -	Myristica oil (see Nutmeg oil). Myrrh gum, bgs	2.25 -	Nutmegs, East Indian, whole , it	b. 3.15
59.85 -	divd	40	ending std., dms.	BIRDEN)				
7.75 8.50 6.50 6.55	Manganese borate printing ink drier. lb. Manganese borate, tech., dmsb. Manganese carbonate, chemical	1,68 1.80 ,80 99	N Sobutyl carbinol (see Methyl any	.51	N			•
13.10 -	grade, 45% Mn. bgs., 20,000 lb. lots or more, works lb.	1.05 -	4 0.0 2000 0 000 1	90				
6.50 –	Manganese chloride, annyo., one., ib.	.61 -	duting Celt)	.41 6.80 +0.40	Naphtha, high solvency (see Solvent naphti Naphtha, petroleum, cleaners (see Cleaner	ne, petroleum).	Ochre (see Iron oxide, yellow, nat.)	lo 5.15
7.90 - .78 .85	L HONKS	0.00 380.00			I Nanhiha. VM&P. OBITOBUITI, 107150.	's naphtha).	Ocotea cymberum oil dms kili Ocotea Chinese 90% kili 1-Octedecanol, syn., tanks, f.c.b ki	b43Va
.90 1.15 let raport).	Manganese dioxide, syn., cryst., bat-	4714	195 KNOW NO KINGTON	14.00 -	New Jersey and New York- gal. Houston, Tex	1.29 1.34 1.20 -	I-Octanol, syn., tanks, f.o.b.	b70 b.
report) .60 .67 .63 .62	chamical fartite crade, same ba-		to 500 kilograms, i.o.b. kilo Marathion, lech., 80%, dms., frt.	10.14 - 9.70 -	Naphthalene, crude, dom., 76°, tanks, worksb.	.22 -	Catal slooked perfurner's grade, bols.	u. 0.20
.341/2 .40	BIB	35 58	12 provide drug.	1.65 - 3.60 5.40	Naphthalene, phthalic anhydride grade, tanks, workslb. Naphthalene, petroleum, 80°C.,	.281/2 -	n-Ootyl, n-decyl phthelate, tanks	
6.27 – 4.00 4.12	Manganese hydrate dme., divd b.	35	drs. cl. (1. same basis ib.	1.32 - 1.40 -	Nanhyhaiana rafri, balls, flakes, whole	.30 .3212	tert-Ootylamine, dms., c.i., t.i., wo Ootylphenol, molten, t.c. works.	11 70
1.50 -	Manganese metal, electrolytic, No.	33W	MacLitt. same basis ib. care. chloride, USP 1-1b. care. lib. care.	5.50	Salors, Joppers, union	.85 .77 .30 .43	Officia of, iq. dms	32
3.32 3.49 2.94 2.95 4.90 5.12	dms. c.i., works.	3435 .67	holy field Methyl roseanline chk	1.79 1,94 oride).	Naphtheric sold, crude, bulk, works lb. refined, 220 sold, same basisb. s-Naphthol, ground, dms., t.l. dvdlb.	1.81 –	Oleio acid. dibi. olet. (Wilner, onie)	38 43
4.90 5.12			cas. a shortde, USP, 1-1b. cas. Historia, NF, 1000-rb. dms. L, m. sid. b. Historia and the control of the contr	3.25 -		1,10	1-1-180KB 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	35
* 9.			Section of the section of	15 (F. 515) B.			Décember 8, 1986	1.20
					The second secon	CARLO CONTRACTA	The Art of the State of the Sta	

_	Mathyl violet toner, tungstated, PTA, bbls., same basis	4.70	5.20	Na
-	4.4Methylene dianilins (p.p-di- aminodiphenyl methane) crude, dms .t.l., f.o.b lb.			2-N
_	purif , flake, same basis ib. Methylone di-p-phenyleno di-Isocyanate	1.75 2.25 (see dishara	- - dmothes-	1-1
-	Methylene chloride, tanks, 4,000 gal	(and dibright)	Annethi 19116	Na a-N
_	min., consumers, divdlb. Methylpentanediol (see Haxylene glycol). Methylphenylpanysless (see Haxylene glycol).	.35	-	1-1 2-1
-	Methylphenylpryazolone (see 1- Phenyl- 5). a-Methylstyrene, f.o.b. shipping pt lb.		razolone-	2-1 Ne
.89 .82	p-Methylnaphthalene, bulk, works.gal. Methylthionine chloride (see Methylene h	.44 1.38	- 1	
	lb., bgs , c.l., works	.071/2	_	ľ
.591/2	ary-gra., rooting, 20 to 80 mesh. works tb.	.07	-	l
.58	paint or lacq., wet-grd., 325-mesh, bgs., c l., f.o b. works ib, rubber, bgs., c l., f.o b. works ib.	.16%	-	Ne
.60	walipaper, bgs., c.l., f.o.b. works. lb. Microcrystallina wax, petroleum, coat-	.16¾ .22	-	146
_	Ing grades, FDA, tanks, works	.361/2	.46%	Ne
-	iaminaling grades. FDA, tanks, works	.381/2	.48	Ne
6.75	tanks, refygal. 65-75 vis., lanks, refygal.	2.38 2.42	- '	Ne Ne
1.55	80-90 vis., lanks, refy	2.45 2.53		Ne Ni
1.66	USP 180-190 vis., tanks, refygal. 200-210 vis., tanks, refygal.	2,54 2.56	-	N:
-	340-350 vis., tanks, refygal. Mineral spirits, patroleum, odoriess, tanks, New Jerseygal.	2.65 1.83	1.88	Ni
7.25	Houston, Tex	1.78	1.79	NI
7.00	tanks, New Jersey gal. Houston, Tex	1.41 1.41	1.49 1.43	NI
7.25 7.50	Molybdate orange, bblslb, Molybdenum metal, com,l., powd., 99.8%, dms., workslb.	1.52 13.50	1.95	Ni
).	Molybdenum trioxide, CP, dms., works, 24,000 lbs. or more.tb.	5.25	-	NI
-	tech , chemical, dms., 24,000 lbs. or more, basis, lb.	2.65	2.85	Ni
-	f tech metallurgical, dms. same basis.ib. Molybdic acid (See Ammonium Dimolybo Monoammonium phosphate, fert.	2.65 iate)	2.85	N
16.00	grade, min. 13% N. 52% P. bulk, c.l., f.o.b. Fla.			N
7.00	workston Monoammonium phosphate, tech.,	155.00	-	N
-	bgs., c.i , t.i., works, frt.	54.00	-	
-	food grade, bgs., c.l., t.l., same ba- sis	59.25 1.69	-	٥
-	Monobulylamine, bulk, divd fb. Monochloroacetic acid, purif. (see Chioro	.96	1.00 mono).	٥
_	Monochlorobenzene, tanks, f.o.b lb. Monoethanolamine, tanks, frt. alid.	.421/2	-	þ.
-	E	.43 .94	.46	0.
_	anhyd., tanks, same basisib. Monoisopropanolamine, dms., c.l., frt.	.92	-	o.
_	alid. E	.76 .66	Ξ	2.
-	Monoisopropylamine, anhyd., dms., c.l., trt. prepald lb. tanka, same basis lb.	.79 .78	-	NN
=	Monomethylamine, anhyd., tanks, con- tained basis frt. equald	.641/2	_	"
2.65	25% soln., tanks, (rt. alid. 100% basisb.	.57	-	١
-	40-60% soin., tanks, frt. equald. 100% basisib.	.631/2	-	
	Monopotassium glutamate, dms., 990 ib. or more, irt. alid	2.50	-	
-	c.l., t.l., divdib. 100-ib. drums, c.l., t.l., divdib.	.76 .85	.80 	۱N
_	Monosodium phosphate (see Sodiumph Montan wax, crude, Imp., German . lb.	osphate, m .55	.57 .	
	dom., Calif., bgs., c.l., t.l., t.o.b. shipt. ptib. raid., dom. Calif., same basisb.	.61	-	N
-	Morphine alkaloid, NF, 25 k lois kilo Morphine sulfate, USP, 25 k lots kilo	1018.00 850.00	-	P
-	Morpholine, dms., c.l., (rt. alid. E fb. tanks, frt. alid., E	1.02 .94	=	2 m
.26	Musk, syn., ambrelle, 25-lb, cns lb. Musk, syn., ketono, dms lb.	6.00 10.75	7.00 _	ľ
Ξ	Musk. syn., xyfol, dms,	3.60 s). .20	_	P
3.80	Mustard seed, Brown No. 1 lb. Canadian No. 1 Yellow lb. Oriental No. 1 bgs lb.	.21 .20	=	l N
=	Myrcia oii (see Bay oil). Myristic acid, comi., pure, t.i., bgs tb.	1.30	-	N
=	tanks	1,12 2,25	-	N
-	Myrrh gum, bgs			-
9.40		•		1
-	 			I
-				-
10.40	Naphtha, high solvency (see Solvent nar Naphtha, petroleum, deaners (see Clear	onthe, petro ner's naphth	ieum). 16).	000
-	Naphtha, VM&P, petroleum, terre, New Jersey and New York- gal.	1.29	1.34	14
-	Houston, Tex	1,20	-	U.
_	WORKS	.22	<u>-</u> .	n
	i Nachthalana, chthalic annygrige	9916	_	
5.40	Naphthalene, phthalic annyoride grade, tarks, works	.231/2	.3214	te
5.40 -	Naphthaiene, phthalic annyorde grade, tanke, worksb. Naphthaiene, petroleum, 80°C., f.o.b. Naphthaiene, reid, balls, fakes, whole salers, lobbers, dms.;	.30		te
<u>-</u>	Naphthaisne, phthalic annycride grade, tarks, works	.30 .65 .30	.32W .77 .43	
5.40 - - 1.94	Naphthaiene, phthalic annycride grade, tarks, works	.30	.77 .43	te O

	2-Naphthot-3,6-disulfonic acid, disodium s	9.20 Balt (see R.:	13.00 selt).	PHE
ine	1-Naphthol-5-sulfonic acid (see L- acid). 1-Naphthol-5-sulfonic 8-amino acid (see S Naphthylamine sulfonic mixed acid (see C	onlett.	ľ	UNE
	Works B	9 10		BRIA
	2-Naphtiylamine-3-suitonic ecid (see Lau 2-Naphtiylamine-4-8 disulfonic ecid (see	Capcalla a <i>c</i>)	PKIC:
ne-	2-Naphthylamine-1-sulfonic acid (see Tob Neatsfoot oil, 20°F, t.l., i.o.b. works	ias acid).		LINA
	dmsb. tanks.f.o.b works to	.52 .47	-	WEEK ENDING
	30°F, t.l., f.o.b. works lb. tanks, f.o.b. works lb.	.52 .44	-	
	40°F, dms., t.l., f.o.b. works lb. tanks, f.o.b. works lb.	.48 .39	.49	Oleum (see Sulfuric acid, fur Olibanum gum, tears, bgs.
	Delivered prices apply on shipments with Philadelphia, Pa.; other gress, 1 k	tin 300.mt	eredius of	Olive oil, edible, Spanish, dri Italian B-type
	higher and West Coast 3c. higher Neomycin sulfate, USP, non-sterile,	ro. rugilor, f.	10AB3, 2C.	Olivine, crude, works 20 mesh. works
	dms., 50-kilo. lots, activity ba-	75.00	_	100 mesh. works Oplum. USP. gran. pow
%	Neopentyl glycol, sturry, 90%c.t., t.l., divdib.	.522	_	Orange oil, expressed, U
″•	powder, flake, bgs. t.f., dlvd lb. Nerol, tech , dms lb.	.598 5.30	5.76	dms., f.o.b. plant expressed Valencia, dms. Calif., dist., cns. 1.o.b. plan
i	perf. grade, dms lb. Neroli ofi, Tunisian, bots kilo 2,	4 80	5.00	Florida, drns. Brazillan
	Nerolin, Bromalin	7.05 7.22	=	West Indian, bitter, Ni dms
	Niacinamide, USP, t.i. dms kito. Niacin NF, dms., 5,000 kitos or more,	6.00	' -	Orange peel, bitter, Haltian Oregano, Greece, 30M
	divd kflo feed-grade, 98-99.5%, bgs., same	7.50	-	Turkey
	basis	5.10	5.50	Origanum oil, Spanish, cns. Orris root, Florentine, bis.
	divd. Eb. Nickel carbonate, dms., bos., 6,000-	1.82	-	powd., bbis., bxs Verona bis
	lbs. to t.l., divd. E	3.45	-	powd., bbls., bxs Ouricury wax, reid., pure, b
	divd. Eb. Nickel fluoborate, liq. conc , dma., i.l.,	1.19	-	Oxalicacid, bgs., c.i., works b-Oxynaphthoic acid on
	divd. E	1.25	-	tech Oxyqunoline base, pure.
	works	3.45	-	frt. alid
•	E	1.18	-	alid
1	ib. lots, f.o.b. works ib. Nickel sulfate, bgs., t.l., divd. E ib.	2.60 .80	- .90	
	Nicotinic acid (see Niacin). Nicotinamide (see Niacinamide).	.00	.20	
	Nitric acid, 36° Be., 38°Be, 40°Be, 42°Be, tanks, c.l., works NF,			
	100% basis ton 94½% to 98% HNO ₃ , tanks, works,	195.00	-	
	100% basis ton o-Nitroanline, flake, dms., t.l.	280.00	-	Palladium metal, works Palmoil, (see Oils, Fats & V
	works	1.51 1.44	-	Palmoli acid, dbl-dist dms tanks
).).	molten, tech., works	1.37	-	s.d., drns
	p-Nitroanline, dms., c.l., t.l., 30.000 ib	1.90	-	Palm kernel oil, bulk, ports
•	min., works ib o-Nitroanisole, 100-kilo lots kilo	1.63 8.75	_	Palmarosa oil, Indian dms. Palmilic acid. 90% tech., b
	Nitrobenzene, tanks, f.o.b lb. o-Nitrochlorobenzene, dms., t.l., c.l.,	.33	.34	tanks Papaverine hydrochloride,
	f.o.b	.82 .74	Ξ	imp. buk Paprika, Hungarian, 100 Al
	2-Nitro-p-cresol, tech., dms., t.l., frt. aild lb. Nitroethane, tanks, dlvd. E lb.	1.75	-	Spanish, 110 AU bgs. Paraffin, fully-reid., 127-13
	Nitrogen solutions, direct application,	2.50	-	tanks, refy
	over 32% N, and mgf. type, worksunit-ton.	1.20	-	140-145 F., ASTM, 150-155 F., ASTM, slack wax, 5% oil, tank
	direct application, 19-32% Nunit-ton.	1.26	1.46	12% oil, tanks refy 20% oil, tanks refy
	Nitrogenous sewage sludgs, proc- essd, bulk, 1.0.b.	440		AMP temperatures are ar Paraformaldehyde, 91%,
	Chicago unit ton. NOTE: Price is per unit NH ₃ plus \$1, pe producer,s works, Chicago.	4.10 grunit a.p.a	. bulk, f.o.b.	C.i., i.i., divd 95%, powd., bgs., c.t
)	 Nitrogenous lankage, processed, bulk. 			Paraidehyde, tech., 98%, ! Li., divd. E
ic).	per unit-ton NH ₃ , f.o.b. Carrol- lyfile, Wisc unit ton f.o.b. Forbes, Me unit ton	7.00 6.75	-	tanks, divd. E
•	expanded, bulk, c.l., per unit-ton N. f.o.b. Forrestdale, R.l. unit ton	8.35	_	Parathion methyl (see Met Parationer red, bbis
	Nitromethane, dms., t.l., divd. E lb. o-Nitrophenol, dms., f.o.b. works lb.	2.37 1.00	_	chlorinated, (red 4) kgs. Patchouli oil, Indonesian.,
	p-Nitrophenol, dms., c.l., f.o.b. works	1.05	1.45	Patchoull oil, Chinese Peach kernel oil, USP (see
	2-Nitropropane, tanks, irt. alid. E lb. m-Nitrotoluene, tech., dms., irt. alid. lb.	.55 1.15	=	Peanut meal (see Oils, Fate (
)	o-Nitrotokiene, dms., c.i., f.o.b	.65 .48	.67	Pectin dom., NF, citrus, idio lots divo
	p-Nitrololuene, tech. dms., c.l., worksb.	.83	.85	Pelargonic acid, nat., tar alid. syn., tanks, i.o.b. fi
	tanks, works	.70	-	Penicitin, potessium, non billion-unit lots,
	les, min. irt. ald	.49 mylpropan	.53½ -olamine hy	Penickin, proceine, sterik unit lots, bulk
	i drochloride) I Nutmea oil, dist., East Indian, NF,			Pennyroyal oil, drns. Pentachtorophenol, 50-lt
	dms	32.00 3.15	34.00	f.o.b. Wichita, Kar Pentaerythritol, tech., bgs
				frt. alid.,
	Λ			Penteerythritoi triscrylate
	U			f.o.b, works, Pentobarbital, dms., 100 i
			الانتخارين	frt. ald Pentobarbital-codhun, ckm or more, civd
	Ochre (see kon oxide, vellow, nat.)			Pentylene letrazot, NF, dri
	Ochre (see Iron oxida, yellow, nat.) Ocotea cymberum oil dms kilo Ocotea, Chinese 90%		5.20	Pepper, black, Brazilan, by
,	LOctagocanol, syn., tanks, f.o.b	.43Va .70		Lampong, bd8 Malabar, bg8
	n-Octane, 97% min., tanks, f.o.b, Houston, Tex	6.25	-	Pepper, red Chinese Fukler Hamen, bgs
	I Cortul picchol, perfumer's grade, DOIS.	1		Comment of Section 1 and 1 and 1

	The state of the s		
	Oleum (see Sulfuric acid, furning).		_
	Olibanum gum, tears, bgs	2.10	_
	Olive oil, edible, Spanish, dms gal.	B.QD	_
of	Italian 8-type	5.35	_
C. 1	Olivine, crude, workston	12.00	_
	20 mesh. works ton	15.00	_
1	100 mesh. works ton	20.00	_
	Oplum. USP, gran. powd. 25-kilo	20.00	
	lots kilo	125.00	_
	lots	120.00	
	dma., f.o.b. plant lb.	1.20	_
	expressed Valencia, dms lb.	.75	_
1	Calif., dist., cns. 1.o.b. plant lb.	1.25	_
	Florida, dms	.60	.65
	Brazillan kilo	.90	.03
	West Indian, bitter, NF X, cns.,	.60	_
	dmsb.	13.00	_
	Orange peel, bitter, Haltian bis, ib.	.38	
	Oregano, Greece, 30M	2.80	
	Turkey	2.80	_
	Mexico	1.05	_
	Origanum oil, Spanish, cnskilo	35.00	_
	Orris root, Florentine, bis ib.	4.00	
	powd. bbis. bxs	4.60	5.00
	Verona bis	3.00	3.00
	powd., bbls., bxs	4.60	5.00
	Ouricury wax, reid., pure, bgs ib.	3.25	3.35
	Oxalicacid, bgs., c.i., worksib	.44	0.00
	b-Oxynaphthoic acid dms. works,		_
	techb.	2.55	_
	Oxygunoline base, pure, 1,000 lbs.,	2.33	_
	frt. alid	8.00	_
	Oxyquinoline sulfate, 100 lbs. Irt.	5.00	_
	alidb.	4.00	_
		7.00	-

1			
ı			
- 1			_
	Palladium metal, works Troy-oz. Palm oil. (see Oils, Fats & Waxes Market	117.00	-
	Palmoli deld dol-dist dmsib	.31V2	_
	tanksib.	.30	_
	tanks	.42	.4
	Palm kernel oil, bulk, c.i.f., U.S.	.35	-
	portsib	18!2	.19
	Palmarosa oil, Indian dms kilo	42.00	-
	Paimilic acid, 90%, tech., bags ib. tenks ib.	.53 .51	-
	Papaverine hydrochloride, NF powd., imp. bulk kilo Paprika, Hungarian, 100 AU bgs. ib.		
	Imp. bulk kilo	56.00 .80	_
	Spanish, 110 AU bgs	90	_
	Spanish, 110 AU bgs lb. Paralfin, fully-reid., 127-130 F., ASTM,		-
	tanks, refy	.29 .33√₂	39 .39
	140-145 F., ASTM, tanks, refy.	.35	.4
	140-145 F., ASTM, tanks, refy. 150-155 F., ASTM, tanks, refy.	.4172	.40
	slack wax, 5% oil, tanks refy	.19 21	_
	20% oil, tanks refy		_
	20% oil, tanks refy AMP temperatures are an arbitrary 3F h	igher than A	NSTP.
b.	Paraformaldehyde, 91%, flake, bgs.	.291/2	_
υ.	C.1., t.l., divd	.391/2	-
	Paragenyde, tech., sore, po-gw. dms.,	.761/2	_
	tanks divd. E	.581/2	_
	tanks, divd. E	1.75	-
	Parathion methyl (see Methyl parathion). Para toner red, bbis	3.75	_
	chlorinated, (red 4) kgsb.	3.75	
	Patchouti oil. Indonesian dms kilo	18.50	20.0
	Patchouli Oil, Chiness	19.00 Loik	21.0
	Patchouli oil, Chiness	urket report)	
	I Pagnut oil (888 CMS, 1888 & Waxes mark	et report).	
	Pectin dom, NF, citrus, powd., 100- kilo lots divd	3.30	3.7
	Pelargonic acid, nat., tanks, min. fd.	.70	
	alid. , ib. sym., tanks, l.o.b. frt. alid. , ib. Panicilin, potassium, non-starile, 200-	.70	-
	Penicitin, potassium, non-sterile, 200-		70.0
*	billion-unit lots, billion-units Panicilin, procaine, starile 50- billion-	25.00	30.0
y-	I Link lots, bulk Dillion units.	36.00	-
	Pennyroyal oil, drns	10.25	⋾
	I I.O.O. WICHNIEL IVER.	.55	-
_	Deminerativital Inch. bas. a.l. (a.b.	~-	-
	frt. alid	./1 Dipentaery	ihritot
	i indentaervinitou.		
	Pentaerythritol triscrylate, t.l. dms.,	1.50	٠ _
	Lo.b. works,	1.00	
	frt.aldb.	7.00	-
	or more chyl.	14.00	٠ _
	Pentylena letrazok, Nr. Oriis., 200-kuu		
	lots	32.00 . 2.35	=
	LAMDONO, DOB	2.87	
•	Malabar, bgsb.	2.37	
1	Melabar, bgs	2.45	: =
•	Haimen, 009	-1.00	-
:	Ling, 2008	.78 .70	-
	Indian, S-4, bgs	43	
ا . ا	Donner white Minink has	3.06	`
	Peppermintieaves, imp., dms ib. Peppermintoli, Medres, ib.	2.00 14.00	: =
٠.	Midwest	15.00	
•	Midwesi	11.00	
1	Yakimaib evn., dms. f.c.b. worksib.	8,00 7.00	9.0
• 1	Byn., dms. f.o.b. wolks	6.50	
ا <u>-</u>	Chinese	6.90	

chre (see Iron oxide, yellow, nat.)	
kotea cumbarum dii dims KNO 0.10	5.20
izotea Chinese 90% Kilo 0.20	-
_Octodecendi.gvn., tenks, 1.0.D 10	7
Octendi syn., tanka. t.o.b	_
-Ociana, 97% min., tanks, 1.0.0,	
Haustra Tex	- .
adul elechei, nerfurher's grade, DOIS.,	. 1.75
Ann 1.10	1.70
-Ootul, n-decyl philipiate, tenks.	.37
dial	, or
ert-Colylamine, dms., c.l., t.l., works: 2.60	
Octylphenol, molten, r.g.,	.76
tanks	1.59
Neio acid. dbldist., (white), drits tb	- 44

Peoper, rad Chinese Fuklen rice bgs ib.
Halmen, bgs. ib.
Liling, bgs. ib.
Indian, SI-4, bgs. ib.
Palaistan, dondicuts, bgs. ib.
Peoper, white, Muntok, bgs. ib.
Peopermint leaves, into., dms. ib.
Peopermint leaves, into., dms. ib.
Peopermint leaves, into., dms. ib.
Willemente ib.
Yakima. ib.
eyn., dms. f.c/b. wolks ib.
Braziken kilo
Chinese kilo CHEMICAL MARKETING REPORTER

9.00

CH	EMICAL
PR	ICES

WEEK ENDING DEC 5, 1986	PRICES	Į
Perchiprorethylene, dry cleaning grade, dist., tanks, divd	LUIAFA	- 1
dest., tanks, dod	WEEK ENDING DEC 5, 198	6
Findust. grade, consumers, Lanks, devil. b. 31		
Perfacilid dins. b. 2.55	indust, grade, consumers, tanks.	
sale, driss, irr. alid. b 5.25 Perubatisam, Lo b. b. 3.25 Perubatisam, Lo b. b. 3.25 Perubatisam, Lo b. b. b. 3.25 Perubatisam, Lo b. b. b. 3.25 Perubatisam, Lo b. b. b. 3.25 I sanks, refy. b. b. 3.75 I sanks, refy. b. b. 3.75 I sanks, refy. b. b. 3.70 I SP, soft white, driss, c.l., refy. b. 3.70 I SP, refy white, driss, c.l., refy. b. 3.70 I SP, refy white, driss, c.l., refy. b. 3.70 I SP, refy. b. b. 3.75 I sense. driss, c.l., refy. b. 3.75 I sense. driss, refy. b. 3.75 I sense. driss, refy. b. 3.75 I sense. driss, c.l., refy. b. 3.75 I sense. driss, refy. sense.	Periacid dms	
Petrojam, USP, show white, dms.	salts, dms., irt. alid ib. 5. barium salts, same basis ib. 5.	.25 -
Li, refy	Petitgrain oil, Paraguay lb. 6.	
USP, soft white, dms, c.l., rely. b. 375 - tanks, rely. db. 370 - Petrolatum. USP, Lilly white, lanks, b. 305 - USP, cream, dms, c.l., rely. b. 385 - tanks, rely. db. 386 - tanks, rely. db. 385 - tanks, rely. db. 386 - tanks, some basis db. 386 - tanks, some basis. db. 386 - tanks, db. 386 - tanks, some basis. db. 386 - tanks, db. 387 - tanks, db.	c.l., refy ib	
Petrolaum, USP, Lilly white, Lanks, 1949. b. 305 - Lanks, 1949. c. 1, 1949. b. 305 - Lanks, 1949. c. 1, 1949. b. 305 - Lanks, 1949. c. 1,	USP, soft white, dms., c.l., refy lb. tanks, refy	.375 - .310 -
tanks, rely. USP, goth yellow, dms. c.l., rely. b. 285 - Larks, rely. DSP, graber, dms. c.l., rely. b. 286 - Larks, rely. DSP, graber, dms. c.l., re	Petrolatum, USP, Lilly white, tanks.	
USP, ambir, dms. c.l., refy. b. 286 - Petroleum plich (see Asphait, potroleum) Patroleum plich (see Asphait, potroleum) MMW, same basis b. b. 49 49 Prices for 51% aulifonic content 2c per ib lower on corresponding molecuser wis b. 49 49 Prices for 51% aulifonic content 2c per ib lower on corresponding molecuser wis b. 1,000-to. lons, d. b. 1,00-to. lons, d. l		365 - 30 -
Petroleum pilch (see Aspheit, potroleum). May same basis	USP, soft vellow, data, c.t., refy lb	
Many, same basis	USP, smber, dms., c.t., refy lb. tanks, refy	
Many, same basis	Petroleum sulfonate, 60-62%, sulfonic cont. HMW, bulk, works ib.	4834 .49
## Phonacein USP, powd, 200 b. dms. 1,000-to. lots, dwd. b. 1,000-to. lots, dwd. b. 2,200	L.MW, same basis	49 – 48 ,4914
100-b. dma, 1,000-db. lots, divd. lb. 220	sponding molecular wits.	lower on corre-
p-Prinantikine, dms., cl., i.o.b. b. Phonobathial, USP, dms., 500-killo lois, i.o.b. works killo Phonobathial-sodium, NF, 500-killo dris, i.o.b. works killo Phenol. Sm. tanks, fri. equald b. 25 29 p-Phanobathial-sodium, NF, 500-killo dris, i.o.b. works killo Bhenol. Sm. tanks, fri. equald b. 25 29 p-Phanobathial-sodium, NF, 500-killo dris, i.o.b. dris, cl., i.o.b works b. 84 - tanks, seme basis b. 86 - Phenolisezike, indust. grade, 551-b. bage, cl., i.o.b. works b. 2.33 - phenyl acetate, driss. 100-lb lots, works b. 1.04 - Phenyl-grade, same basis b. 1.04 - Phenyl-sodial dris, cl., i.o. dris, cl., i	1,000-lb. lots, divd lb. 2: 100-lb. dre. 1	
Phenot, syn. tanks, frt. equald. b. 25 p-Phenotaultanic acid, 85% aci'n. dms. cl. (100 works b. 84 p-Phenotaultanic acid, 85% aci'n. dms. cl. (100 works b. 86 p-Phenotaultanic acid, 85% aci'n. dms. cl. (100 works b. 86 p-Phenotaultanic prade, 50-b. bags, cl. (1, 0, b. works b. 2, 33 punt grade, same basis b. 2, 68 p-Phenyl acetate, dms. 100 b. lots. works b. 1.04 p-Phenylatanine, dms. 25-b. 1.04 dl-Phenylatanine, dms. 25-b. 1.05 dms. 200-b. lots, dwo. E. 1.b. 3.45	n.Phonolidise done of Lob the G	
Phenot, syn. tanks, frt. equald. b. 25 p-Phenotaultanic acid, 85% aci'n. dms. cl. (100 works b. 84 p-Phenotaultanic acid, 85% aci'n. dms. cl. (100 works b. 86 p-Phenotaultanic acid, 85% aci'n. dms. cl. (100 works b. 86 p-Phenotaultanic prade, 50-b. bags, cl. (1, 0, b. works b. 2, 33 punt grade, same basis b. 2, 68 p-Phenyl acetate, dms. 100 b. lots. works b. 1.04 p-Phenylatanine, dms. 25-b. 1.04 dl-Phenylatanine, dms. 25-b. 1.05 dms. 200-b. lots, dwo. E. 1.b. 3.45	kils 1.o.b. works kilo 19. Phonobarbital-sodium, NF, 500-kilo	
dms, cl., (bb works b. 58	Phenol, syn. tanks, frt. equald lb.	
Degis cl. 1, 0.6, works D. 2,33 Degis clate, drns. 100-lb lots. Degis clate, drns. 100-lb lots. Works D. Degis clate, drns. 100-lb lots. Degis clate, drns. 100-lb lots. Degis clate, drns. 100-lb lots. Degis clate clate, pure cryst. 25-lb. Degis clate clate, pure cryst. Degis clate clat	dms. c.l., (ob works lb	
Phenyl acetate, drns. 100-lb. tors. works	Dags, C.I., J.O.D. Works ID. 2.3	33 -
Priorylacotic acid, pure cryst. 25-bb. ors bb. dl-Phenylafanine, dms. 25-kilo lots kilo. 1-Phenylafanine, dms. 25-kilo lots kilo. 1-Phenylafanine, dms. 25-kilo lots kilo. 1-Phenylafanine, dms. 25-kilo dms. 200-lb. lots, dwo E b. 1-Li b. works b. 1-Denylamediamine, llaked, dms. 1. 1-Denylamediamine, llaked, dms. 1. 1-Denylamediamine, llaked, dms. 1. 1-Denylamediamine, llaked, dms. 1. 1-Denylamine, dms. 1. 1-D	Phenyl acelate, dms., 100 lb. lots.	
1-Phenyl-3-carbethoxy pyrazolone-5, drns 200-lb. lots, dwd. Elb. 3.45 m. Phenylenediamine, cast, drns. c.l. 1.0. 2.07 o Phenylenediamine, laked, drns. t.l. 1.0. b. workslb. 3.25 p. Phenylenediamine, laked, drns. t.l. 1.0. b. workslb. 3.25 p. Phenylenediamine, laked, drnsl. 1.0. workslb. 3.25 p. Phenylenediamine, laked, drnslb. 3.25 p. 100-kio kins or more kilo. 175.00 lasslb. 2.10 p. 2.20 p. Phenylenylardine, drnslb. 3.55 p. 2.20 p. Phenylenylardine, drnslb. 3.55 p. 2.20 p. Phenylenylardine, drnslb. 3.50 p. Phenylenylardine, drnslb. 3.50 p. Phenylenylardine, drnslb. 3.50 p. Phenylenylardine, drnslb. 3.50 p. 1-Phenylenylardine, drnslb. 3.50 p. 1-Phenylenylardine, drnslb. 3.50 p. 1-Phenylenylardine, drnslb. 3.50 p. 1-Phenylphenol, drnslb. 3.50 p. 1-Phenylphenol, drnslb. 3.50 p. Phenylphenol, drnslb. 3.50 p. Phenylphenol, drnslb. 3.50 p. Phenylphenol, drnslb. 3.50 p. Phenylphenol, drnslb. 3.50 p. 1.35 p. 2.00 p. Phenylphenol, drnslb. 3.50 p. 1.35 p. 1.35 p. 2.00 p. Phenylphenol, drnslb. 3.50 p. 1.35 p. 2.00 p. Phenylphenol, drnslb. 3.50 p. 1.35	Phonylacotic acid, pure cryst., 25-lb.	
m-Phenylenediamine, cast, dms. cl., 1.l. to b.works	di-Phenyisianine, dms., 25-kilo lots	
C-Prenylendelamine, flaked, dms. LL. 1	dms. 200-lb. lots, dvg. E lb. 3.4	
p-Phenylanedamine, Itaked, dms., I.o.b. works b. No. 175.00 185.00 104.ko kats or more i.kilo. 175.00 185.00 185.00 104.ko kats or more i.kilo. 175.00 185.00 185.00 196.ko kats or more i.kilo. 175.00 185.00 185.00 196.ko kats or more i.kilo. 1.50 196.phenylahylacehol. NF. dms. b. 2.10 2.20 196.phenylahylacehol. NF. dms. b. 1.50 196.phenylahylacehol. NF. dms. b. 1.50 196.phenylaydrazine, 99% min., dms. b. 1.50 196.phenylaydrazine, 99% min., dms. b. 1.50 196.phenylaydrazine, 99% min., dms. b. 1.35 2.00 196.phenylaydrazine, 11.20 196.ko dm. kilo 24.00 28.00 196.phenylaydrazine hydrochioride, 100-kao dm. kilo 24.00 28.00 196.phenylaydrazine hydrochioride, 100-kao dm. kilo 24.00 28.00 196.phenylaydrazine hydrochioride, 100-kao dm. kilo 22.5 196.ko 28.00 19	ilionworks in 20	37 -
Phenylephrine hydrochloride, USP 100-kiokats or morekilo. 175.00 185.00 Phenylethylacchol, NF, dms. b. 3.35 2.20 Phenylethylacchol, NF, dms. b. 2.10 2.20 D-Phenylethylacchol, NF, dms. b. 1.50 - or more, firt. alid b. 5.50 8.90 Phenylethylphenyl acetate, 25-lb. (ns. 1.50 - benylethylphenyl acetate, 25-lb. (ns. 1.50 - benylethylphenylphenyl acetate, 25-lb. (ns. 1.50 - benylethylphenylphenyl acetate, 25-lb. (ns. 1.50 - benylethylphenylphenyl acetate, 25-lb. (ns. 1.50 - benylethylphenyl	f o.b. works	25 -
Phenylethylacholi, NF, 6ms. b. 3.35 2-Phenylethylacholi, NF, 6ms. b. 2.10 2-Phenylethylacholi, NF, 6ms. b. 1.50 Phenylethylamine, dms. 30,000 bs. or more, frt. alld b. 1.50 Phenylethylphenyl acealate 25-lb. chs b. 5.50 Rhenyletylphenyl acealate 25-lb. chs b. 5.50 Phenylylyconicacid (see Mandelic acid.) Phenylylyconicacid (see Mandelic acid.) Phenylylyconicacid (see Mandelic acid.) Phenylyl-3-methyl-5-pyrazolons, dms. 250-lb. lots dive E. lb. 1.80	Phanylephrine hydrochloride, USP	
p-manyalhyamine, dms. 30,000 bs. or more, frt. alid b. 5.50 8.90 Phenylethylphenyl scelate. 25-lb. (ns. b. 5.50 8.90 Phenyleyconic acid (see Mandelic acid). Phenylyconic acid (see Mandelic acid). Phenylyconic acid (see Mandelic acid). Phenylydrazine, 99% mm., dms b. 3.50 - 1-Phenyl-3-methyl-5-pyrazolone, dms. 250-b. bats dwc E. lb. 1.80 - 0-Phenylphenol, dms. tt., works b. 1.35 2.00 p-Phenylphenol, bgs. tt. 14,000 lbs. or more, works lb. 1.35 2.00 p-Phenylphenol, bgs. tt. 14,000 lbs. or more, works lb. 1.85 - Phenylpropanolamine hydrochloride, 100-kio dm kib. 024.00 28.00 Phenylperiopanolamine hydrochloride, 100-kio dm kib. 024.00 28.00 Phenylperiopanolamine hydrochloride, 100-kio dm	Phenyleihyl acetete, dms	35 -
Phenyleithylphenyl acetate. 25-lb. (A). ib. 5.50 8.90 Phenylyconic acid (see Mandelic acid). Phenylydrazine, 99% min., dms. ib. 3.50 1-Phenyl-3-methyl-5-pytrazolone, dms. 250-lb. lota dwd E. ib. 1.80 0-Prenylphenol. dms. t.ll., works. ib. 1.35 2.00 p-Phenylphenol. bgs. t.ll. 40,000 lbs. or more, works. ib. 1.85 - Phenylpropanolamine hydrochloride, 100-kib dm. kibo 24.60 28.00 Phenylselicylate, purit. cryst. dms. E. ib. 2.75 - lech. cryst. E. ib. 2.25 - lake, E. ib. 2.35 - Phloxine toner (red 90), dms. frt. altd. ib. 1.95 2.05 Phospate rock, Fla., land pebble, rum of mnewashed, 66-68% b.p.f. bulk c.l. mines. ion 23.15 - vessel, Tampa, same basis. ton 26.00 Phosphoric acid, com'l. and tech. g r e d e s. 7 5 % t s n k s, works. 7 5 % t s n k s, works. 100 lbs. 28.00 80° tanks, works. 100 lbs. 33.50 - Food grade prices \$2.00 above tech. grade. Phosphoric acid, agricultural grade, 52-54% 8.p.a., tanks, works unit-ton. super, min. 70% a.p.a., same basis unit-ton. 9 hosphorus white (yellow) sold dms. c.l., works, fin. equald. ib. 1.00 Phosphorus pentasulitide, powd. dms. c.l., works. 100 lbs. 50 00 Phosphorus pentasulitide, powd. dms. c.l., works. 100 lbs. 50 00 Phosphorus pentasulitide, powd. dms. c.l., works. 100 lbs. 50 00 Phosphorus pentasulitide, powd. dms. c.l., works. 100 lbs. 50 00 Phosphorus pentoxide, dms., c.l., works. b. 38 Phosphorus seagusulikide, dms., c.l., works. b. 38 Phosphorus richtoride, idae, c.l., J. dms., int. equald. b. 40 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b. 30 Phosphorus trichtoride, idae, c.l., J. dms., int. equald. b	p-Phanyleitylamine, dms., 30,000 lbs.	
Phenylhydrazine, 99% min., dms., lb. 3.50 1-Phenylp-3-methyl-5-pyrazolone, dms., 250-lb. lote dwd E. lb. 1.80 0-Prenylphenol, dms., Ll., works., lb. 1.35 2.00 Phenylphenol, bgs., Ll. 40,000 lbs. or more, works. lb. 1.85 Phenylpropanolamine hydrochloride, 100-kido dm., kido 24,00 Phenylsalicylate, purit, cryst., dms., E. lb. 2.75 lech, cryst., E. lb. 2.25 Photoxine toner (red 90), dms., frt. alld., E. lb. 2.35 Phloxine toner (red 90), dms., frt. alld. 1.95 Phosphate rock, Fla., land pebble, nm. of mnewashed, 86-68% b.p.f. bufk cl., mines ton 23,15 Phosphate rock, Fla., land pebble, nm. of mnewashed, 86-68% b.p.f. bufk cl., mines ton 23,15 Phosphate rock, Fla., land pebble, nm. of msewashed, 86-68% b.p.f. bufk cl., mines ton 23,15 Phosphate rock, Fla., land pebble, nm. of msewashed, 86-68% b.p.f. bufk cl., mines ton 23,15 Phosphate rock, Fla., land pebble, nm. of msewashed, 86-68% b.p.f. bufk cl., mines ton 23,15 Phosphate scal, com'l, and tech., grades, 75% tsnks, works. 100 lbs. 28,00 Phosphoric acid, com'l, and tech., grades, 75% tsnks, fob. freight equald. 100 lbs. 33,50 Food grade prices \$2.00 sbove tech. grade. Phosphorus acid, agricultural grade, 52-54% s.p.a., tanks, works 100 lbs. 33,50 Food grade prices \$2.00 sbove tech. grade. Phosphorus, white (yellow) sold dms., cl., works. 100 lbs. 45,00 Phosphorus oxychloride, lanks, frt. equald. 100 lbs. 45,00 Phosphorus pentasulitide, powoders, cl., works. 100 lbs. 45,00 Phosphorus trichloride, dms., cl., works. 100 lbs. 45,00 Phosphorus trichloride, lanks, cl., lb. 35 Phitalocyanne biue tonor, red shade, bbs. 100 lbs. 100 lbs. 100 lbs. 100	Phenylethylphenyl acetate, 25-lb.	
dms, 250-lb. lots dwd E. lb. 1.80Prenylphenol, dms. Lt., works b. 1.35 2.00 -Phenylphenol, bgs., Lt. 40,000 lbs. or more, works. b. 1.85 Phenylpopanolamine hydrochloride, 100-kilo dm. kilo 24.00 28.00 - Phenylsalicylate, purit. cryst., dms., E. lb. 2.75 lech, cryst., E. lb. 2.25 lake, E. lb. 2.35 Phioxine toner (red 90), dms., frt. altd. lb. 1.95 2.05 - Phosphare rock, Fla., land pebble, run of manewashed, 46-68% b.p.f. bufk cl., mines ton 23.16 - vessel, Tampa, same basis ton 28.00 - Phosphoric acid, com'l, and tech. grades 7.5% tanks, works. 100 lbs. 29.00 - 80% tanks, works. 100 lbs. 29.00 - 80% tanks, works. 100 lbs. 31.00 - 85%; N.F. tanks, Lo.b. freight equald. 100 lbs. 33.50 - Food grade prices \$2.00 above tech: grade. Phosphoric acid, agricultural grade, 52.54% 8.p.a. tanks, works. unit-ton 3.10 - super, min. 70% a.p.a., same basis. unit-ton 3.10 - super, min. 70% a.p.a., same basis. unit-ton 3.45 - Phosphorus valveloride, tanks, frt. equald. b. 1.00 b. Phosphorus pentasulide, powd. dms. cl., works. 1.00 lbs 50.00 - tote bns, sellers. 100 lbs 50.00 - Phosphorus rechtoride, dms., ct., works. b. 82 - Phosphorus sesquisulide, dms., cvs. cl., works. b. 38 - Phosphorus sesquisulide, dms., cvs. cl., works. b. 38 - Phosphorus rechtoride, dms., ct., works. b. 38 - Phosphorus sesquisulide, dms., ct., works. b. 38 - Phosphorus trichtoride, dms., ct., works. b. 39 - Phosphorus trichtoride, dms., ct., works. b. 30 - Phosphorus trichtoride, dms., ct., works. b. 35 - Phithel carlydride, lake, c.l., ld, dms., frt. equald. b. 30 - molten tanks, same basis. b. 9.10 - prices l-11/s. por lb, higher on the West Coast Phithalimide, llake, works. b. 85 - Phithalimide, llake, works. b. 9.5 - green shade, same basis. b. 9.40 - resinated, bbls., samo basis. b. 9.40	Phenylhydrazine, 99% min., dmslb. 3.	.50 –
p-rienyphonol, bgs., II. 40,000 bs. or more, works. b. 1.85 Phenylpropanolamine hydrochloride, 100-k80 dm. k80 24,00 28,00 Prienylselicylate, purit. cryst., dms., E. 1b. 2.75 lech, cryst. E. 1b. 2.25 lake, E. 1b. 2.35 Phloxine toner (red 90), dms., frt. altd. b. 1.95 2.05 Phospane, 1-ion rel. cryst. 5 to 9-cry. quantities, works. b55 .67 Phospane rock, Fla., land pebble, run of mnewashed, 86-88's b.p.t. bulk cl. mines ion 23,15 - vessel. Tampa, same basis ton 28,00 - Phosphoric acid, com'l., and tech. grades. 75% tanks, works. 100 bs. 28,00 - Phosphoric acid, com'l. and tech. grade. Phosphoric acid, agricultural grade. 52-54% a.p. a., tanks, works. 100 bs. 33,50 - Food grade prices \$2.00 above tech. grade. Phosphoric acid, agricultural grade. 52-54% a.p. a., tanks, works unit-ton. 3.10 - super, min. 70% a.p.a., same basis unit-ton. 3.45 Phosphorus white (yellow) sold dms., cl., works. in. equald. b. 1.00 - lanks, works, in. equald. b. 1.00 - lanks, works, in. equald. b. 40 Phosphorus oxychioride, lanks, frt. equald. b. 40 Phosphorus rentasultide, powd. dms., cl., works. b. 82 Phosphorus sesquisulfide, dms., cvs., cl., works. b. 82 Phosphorus trichforide, dms., cl., works. b. 91 Phosphorus sesquisulfide, dms., cvs., cl., works. b. 92 Phosphorus trichforide, dms., cl., works. b. 95 Phosphorus trichforide, dms., cl., works. b. 97 Prices 1-11/2c.per b. higher on the West Coast Phitalamide, lake, corr., red shade. bbs., frt. alid. E. of Flockles. b. 945 green shade, same basis. b. 940 restriated, bbs., samo basis. b. 940	dms., 250-lib. lots divd E lib. 1, 0-Phenylohenol, dms., t.l., works lib. 1,	
100-k80 dm	p-r-nenylphenol, bgs., t.l., 40,000 fbs. or more, works	
lech, cryst, E	100-kilo dm	.00 28.00
Phioxine toner (red 90), dms. frt. alid. lb. 1,95 2,05 Phospane, 1-ton rel. cyts. 5 to 9-cyt. quantries, works. lb. 55 .67 Phosphate rock, Fla., land pebble, rum of mniewashed, 66-68% b.p.f. bufk cl. mines ton 23,16 - vessel. Tampa, same basis ton 28,00 - Phosphoric acid, comit, and tech. grades. 7 5 % to n.k.s., works. 100 lbs. 29,00 - 80° tanks, works. 100 lbs. 31,00 - 85°. N.F. tanks. (b. hreight equald. 100 lbs. 33,50 - Food grade prices \$2.00 above tech. grade. Phosphoric acid, agricultural grade, 52 5 4 % 8 .p. a. 1 anks. works. while ton 3,10 - super, min. 70% a.p.a., same basis. unit-ton. 3,45 - Phosphorus very levelow) soid dms. cl., works, fin. equald. lb. 1,00 - tanks. works, fin. equald. lb. 1,00 - tanks. works, fin. equald. lb. 40 - Phosphorus pentasultide, powd. dms. cl., works. 100 lbs. 50 00 tote bins, sallers. 100 lbs. 50 00 - tote b	E	
Phosphere 1-ion rel. cyts. 5 to 9-cyt. quantities, works lb	Phioxine toner tred 90), dms., frt.	
Priosparare rock, Pla., land pebble, run of minewashed, 86-88's b.p.f. bulk c.f. mines from 23.15 vessel, Tampa, same basis from 28.00 Phosphore acid, com'll, and tech grades, 75% tainkis, works. 100 lbs. 29.00 86° tanks, works. 100 lbs. 31.00 85%. N.F. tanks, f.o.b. freight equald. 100 lbs. 33.50 Food grade prices \$2.00 above tech grade. Phosphoric acid, agricultural grade, 52.54% a.p.a., tankis, works. 100 lbs. 33.50 Food grade prices \$2.00 above tech grade. Phosphoric acid, agricultural grade, 52.54% a.p.a., tankis, works. 100 lbs. 3.10 super, min. 70% a.p.a., same basis. 100 lbs. 3.10 super, min. 70% a.p.a., same basis. 100 lbs. 100 ranks, works, in. equald. 100 lbs. 100 ranks, works, in. equald. 100 lbs. 100 ranks, works, in. equald. 100 lbs. 100 ranks, works, 100 lbs. 100 lbs. 100 rote bins, sellers. 100 lbs. 100	Phosgene, 1-ton rel. cyts., 5 to 9-cyt.	
DURCI, Tampa, same basis ton 23.15 vessel, Tampa, same basis ton 28.00 Phosphoric acid, corn'i, and tech. Q r d d s 7 5 % to n k s, works 100 lbs 29.00 80°tanks, works 100 lbs 33.00 85°t. N.F. tanks, [o.b. freight equald 100 lbs. 33.50 Food grade prices \$2.00 above tech. grade. Phosphoric acid, agricultural grade, 52 5 4 % 8.p. a. tanks, works unit-ton 3.10 super, min. 70% a.p.a., same basis unit-ton 3.45 Phosphorus, white (yellow) sold dms., C t, works, in- equald lb 1.00 tanks, works, l.o.b. works. lb 91 Phosphorus oxychioride, tanks, frt. equald lb 40 Phosphorus pentasulitide, powd., dms., c1, works 100 lbs 50.00 tote bins, sellers 100 lbs 45.00 Phosphorus pentasulitide, dms., t1. works lb 82 Phosphorus trichtoride, dms., cvs., c1, works lb 38 Phosphorus trichtoride, dms., c.l., works lb 35 Phitheir carinydride, ltake, c.l. 1, dms., fit. equald lb 35 Phitheir carinydride, ltake, c.l. 1, dms., fit. equald lb 35 Phitheir carinydride, ltake, c.l. 1, dms., fit. equald lb 35 Phithalmide, ltake, c.l. 1, dms., fit. equald lb 35 Phithalmide, ltake, c.l. 1, dms., fit. equald lb 35 Phithalmide, ltake, c.l. 1, dms., fit. equald lb 35 Phithalmide, ltake, c.l. 1, dms., fit. equald lb 35 Phithalmide, ltake, core red shade, Dbls., fit ald, E. of Flockles lb 945 green shade, same basis lb 945 green shade, same basis lb 945 green shade, same basis lb 945	Characters, works Ib. Phosphate rock, Fia , land pebble, run of mine washed. REARIN h = 1	.55 .67
Phosphoric acid, com'i, and tech.	vessel. Tampa, same basis ton 28.	
85°: N.F. tanks, I.o.b. freight equald	Phosphoric acid, com'i, and tech. grades, 75% tanks.	_
S2:54% 8.p.a. tanks, works	80°42nks,works 100 lbs. 31	45
S2:54% 8.p.a. tanks, works	equald	- 03.
Phosphorus, white (yellow) sold driss. c1, works, fm. equald lb. 1.00 Iariks, works, fm. equald lb. 1.00 Iariks, works, fm. equald lb. 1.00 Phosphorus oxychloride, tanks, fm. equald lb. 40 Phosphorus pentasulitide, powd. dms. c1, works 100 lbs. 50 00 tote bins, sellers 100 lbs. 45 00 Phosphorus pentoxides, dms., t1. works lb. 82 Phosphorus sesquisulfide, dms., cvs. c1, works lb. 38 Phosphorus trichforide, dms., c.i. works lb. 35 Phosphorus trichforide, dms. c.i. works lb. 35 Phosphorus trichforide, dms. c.i. works lb. 35 Phosphorus trichforide, dms. c.i. works lb. 35 Phithalianthydride, take, c.i. J. dms. fit. equald lb. 30 molten tanks, same basis lb. 27 Prices I-11/2c.por lb. higher on the West Coast Phithaliantde, flake, works lb. 85 Phithaliantde, flake, works lb. 945 green shade, same basis lb. 930 resinated, bbis., same basis lb. 930 resinated, bbis., same basis lb. 9.10	52-54% a.p.a., tanks.	
Phosphorus oxychioride, tanks, frt. equald	super, min. 70% a.p.a., same	
Phosphorus oxychioride, tanks, frt. equald	Phosphorus, white (yellow) solid dms., cl., works, int. equald	
equaid b. 40 Phosphorus pentasulitide, powd. dms_c1, works. 100 lbs 50 00 totebris, sellers. 100 lbs. 45 00 Phosphorus pentoxide, dms., t.i. works	Phosphorus oxychloride, lanks, frt.	.91 -
works	Phosphorus contratallide noved	
Phosphorus sesquisulfide, dms., cvs., cl., works	tote bins, sallers 100 lbs 45 Phosphorus pentoxide, dms 1	
Cl. works b. 38 Phosphorus trichloride, dms. cl., works b. 40 tanks, works b. 40 tanks, works b. 35 Phtheir carhydride, frake, cl. (1), dms., frt. equald b. 10 molten, tanks, same basis b. 27 Prices 1-1 Vac. per lb. higher on the West Coast Phthalmide, flake, works b. 85 Phthalocyanne blue tonor, red shade, blue, tonor, red shade, lake, works b. 945 groon shade, same basis b. 945 groon shade, same basis b. 940 resinated, bbls. same basis b. 940	Phosphorus sesquisulfide, dins., cvs.,	
Printer carryonde, rake, c.i., i.j., dms., frt. equald	C.I., works	
rit. equald b. 30 molten. tanks, same basis ib. 27 Prices i-11/c. per lb. higher on the West Coast Phithalimide, liake, works ib. 85 Phthalocyanne blue tonor, red shade, bbls it and E. of Flockles ib. 9.45 green shade, same basis ib. 9.30 resinated, bbls. same basis b. 9.10	works	
Prices 1-13tc. per lb, higher on the West Coast Phthalmide, flake, works	frt. equald	30 - 27 -
Phthalocyanne blue tonor, red shade, bbls., irr and E. of Rockles	Prices 1-112c. per lb. higher on the West Co Phthalimide, flake, works lb.	eşt
resinated, bb/s., samo basislb. 9.10	Phthalocyanine blue tonor, red shade, pbls., frt. and. E. of Rockles lb. S	
	resinated, bbis., same basis lb. 9).10

	_					
ï	Phthalocyanine blue toner, water dis-			Potassium bichromate, gran., 400-lb. dms., c.1, t.l., works lb.	.48	_
۱	persable, bbls., seme ba- sisb. Phthalocyanine green toner, all grades,	9.45	17.30	Patassium bifluoride, tech., dms., t.l., works., frt. equaldb.	.45	.49
l	bbis., irt. elid. E. of Rock-	9.30	14.00	Potessium bitartrate, NF, gran., powd., bos	.90	1.20
١	Phthalocyanine green toner, resinated, pbis., same basis	8.65	9.45	Potaesium borohydride, powd. dms., 100-1,000 lbs., works !b.	18.00	20.00
l	Phihalylsulfacetamide, dms., 500-kilo lotekilo.	6.61	-	Potassium bromate, gran., powd., 200-lb. dms., c.l., f.o.b.	1.08	_
I	Picolinas, refd, mixed, bulk klio Picric acid, pure paste, 25-b. ctns., c.l.,	2.81	-	worksb. Potassium bromide, NF., gran., dms., c.i. f.o.b. worksb.	1.12	_
ļ	dry basis, f.o.b. Charlotte, N.C	6.00	- }	Potasskim carbonata, Iq., 47% K ₂ CO ₃ , (anks, t.w., works 100 lbs.	14.60	_
١	sis, f.o.b. Charlotte, N.C ib. Pigmani green B, kgs b.	5.00 2.20	-	dms., c.l., t.l., works 100 lbs. catcined, 99-100% K ₂ CO ₂ , hopper	20.65	-
l	Piliocarpine hydrochloride, USP, dms	,500.00	2,000.00	works 100 fbs.	32.60	-
l	Pimento see Alispice Pimento lesf oll, dms	13.90	- [bgs., c.i., t.i., works 100 lbs. drums 100 lbs.	35.20 36.40	=
l	Pine oil, 80% min. alcohol content, bulk, f.o.b. works 100 lbs dms., c.l., t.l., same	47.00	53.00	Potassium carbonate, gran., purii., 400-lb. dms., 5-dm. lots ib.	.40	.46
۱	dms., c.i., t.i., same basis 100 lbs a-Pinene, pertume grade kilo	51.00 1.62	54.00	Potassium chiorate, cryst., dms., c.!., works	.14½ .30	-
l	tech. gradelb. b-Pinene, perfumery grade. tankskilo	.18 2.30	.23 -	purif., gran., 325-lb. dms., f.o.b. shipping pointlb.	.40	_
1	tech.grade.tanks	.35	.40	Potassium chloride, chamical grade, 99,95% KCI, bulk, c.i., f.o.b		
١	E	1.80 2.25	2.35	USP cryst_dmsb.	105.00 1.12	-
l	Piperazine dihydrochloride, 53%, dms., t.l., frt. aldlb.	2.00	2.03	USP gran., dms	.67 .67	
l	Piperazine hexahydrate, 44%, dms., 1,100-lb. lots, frt. aild lb.	1.80	-	Potassium chloride, agricultural (see Pota Potassium chromate, purif., cryst., dms., works	.57	gte). _
l	Piperazine phosphate, 42%, dms., t.l., frt. alidlb.	1.80	-	Potassium citrate, NF, gran., 200-lb. dms., irt. alidlb.	.931/2	_
l	Piperidine dist. 98% min., dms., c.i., t.i., workskilo.	6.92	- }	Potessium cyanide, dms., 20,000-lb. lots or more, i.o.b. works lb.	1.32	_
l	Piperonyl butoxida dma., divd. E ib. Plabnum, metal, works Troy oz. Polycarbonate resin, peliels, nat., t.i.,	5.00 481.00	-	Potessium dichromate (see Potessium bichromate).		
١	frt. alid	1.84	1.86	Potassium fluoborate, tech., drns., c.l., t.l., works, frt. equald ib.	1.40	1.42
l	thophthallo, bulk, tankcars, fit ald	.51	.53	Potassium fluoride, anhyd., dms., Ll.,b.	1.68	-
	isophthalic, same basis lb. Polyethylene resin, high-density, blow	.56	.62	Polassium gluconate, dma., t.l., f.o.b. worksb.	1.45	-
	making, g.p., hopper cars, int.	.44	.52	Price W. of Denver 4c. per to. higher. Potessium gualacoleulionate, 300-lb. dms., 600 lbs. or more frt.		
	injection maiding, g.p.,hopper cars, int. alid ib. extrusion, g.p., hopper cars, same	.43	.46	equaldb. Potassium hydroxide, tech. (see Potash,	2.10 caustic).	-
	basis	.47	.48	Potassium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works,	·	
	same basis	.54	.65	irt. equald lb. Potassium lodide, USP. gran., cryst.,	1.31	1.33
	sis	.65	.75	dms., 1,000-lb. lots divd lb. ACS grade truckload lb.	10.72 11.32	12.3 9 13.55
	Boer, hopper cars, frt alld ib. clarity film, hopper cars, frt., alldib.	.35 .35	.36 .37	Potassium-magnesium sulfate, std., bgs., workston basis 40% K ₂ SO ₄ and 55%	59.00	-
	pallet shrink tilm, hopper cars, same basis b.	.35	_	MgSO ₄ bulk, works ton Potassium metablauliate, gran., dms.	67.00	-
	extrusion coating, hopper care, b.	.38	.42	1)	.44	-
	g.p., hopper cars, same basis . lb. Polyethylene linear low-density g.p.	.37	.38	K,O, sid., bulk, c.l., fri. equald., f.o.b. Sask.,		
	tesin. blown (ilm rasin cast film resin	.36 .40 .40	.40 431/2 45	Canada ton	52.00	53.00
l	Polyethylene resin, fow-density injec- tion molding, g.p., hopper	10	0	Saskton coarse, f.o.b. Saskton gran, f.o.b. Saskton	53.50 57.00	54.50 58.00
	cars, same basis	.45 .70	.48 1.15	Polassium nitrate. fert. grade, std., 50- ton c.l., divd. SE ton	58.50 267.00	59.50 274.00
l	wire and cable thermoplastic high- voltage, natural color, same			prilled ton tech., gran., bgs., c.t., min. 50 tons,		284.00
	basis	.80	.90	divdton Potassium oxalate, neutral, tech., fine	470.00	-
١	basis b. wire and cable jacketing, black ib.	.68 .60	.73 .61	gran., powd., 300-lb. dm., frt. equaldlb.	2.54	-
ļ	Polymyxin sulfate, USP, bulk, 50-billion units min million units	.52	_	Potassium pentaborate, gran., bgs., c.l., works	1.01	-
۱	Polyoxyathylene sorbitan monos- tearate, dms., 20,000-lb. lots,			dms., same basis ib. Potassium pentaborate powder 15c. per Potassium perchiorate, dms. c.l.,	1.06 rlb. Ngher.	-
l	Polyoxyathylene sorbitan triatesrate, dms., 20,000-lb, lots,	.73	-	worksib. Potassium permanganate, free flow-	.78	-
l	worksib. Polypropylane resin, homopolymer,	.73	-	ing, bulk, hopper trucks, worksb.	1.09	_
١	g.p., nat , t.i., frt. alidib. copolymer, med. impact, nat.,	45	.48	50-kg. dms., same basisib. 150-kg. dms., same basisib.	1.20 1.17	=
l	same basis b. high impact, same basis b.	.50 .53	.68 .60	Potassium permanganate, USP, 50-lb. kgs., works, c.l., t.l ib. Potassium persulfate, 225-lb. dms.	1.38	-
I	Colored material 6c per lb. higher for each grade. Polystyrene resin, cryst., nat., hopper			24,000 lbs. or more, f.o.b.	78.80	_
۱	cars, frt. alid	.48	-	ci/il same basis	72.50	-
	sis	.51	-	bgs., c.l., t.l., works, E., frt. equald100 lbs.	63.75	64.00
l	cars same basis b. expandable beads (EPS), pkging	.52	-	liquid, bulk	46.00	49.60
l	grade, 1,000-lb. lolslb. modified, same basislb. Polyvinyi stochot, fully hydrolyzed,	.69 .73	=	tb. dms., 2,000 lbs. or more, works. frt. alkl fb. USP, pawd., 300-b. dms., 2,000 lbs.	1.52	-
ļ	medium viscosity, bgs., t.l., dtvd	1.00	1,05	Ormore, same basis fb. Potassium silicate, soin., 29.8-30.2	1.42	-
۱	partially nydronyzed, medium yiscos-	1.05	-	Works 100 lbs.	18.90	_
1	Polyvinyi chlorida resin, g.p., homo- polymer dispersion, bgs., t.i.,			Oms., c.l., t.l., works. 100 lbs. Potassium silicate, 40-40-5 Bs., 2.1 rs-	25.90	-
	g.p. auspension, bulk, same ba- sis	.50 .38		90, t.C., t.t., works 100 lba. 40-40.5 Be., 2.1 ratio, cims	25.05	-
	pipe grade, bulk, same basis (b. film grade, bulk, same basis (b.	.47 97	- .47	C.I., t.I., works 100 bs. Potessium silicate, electronics grade, 30-30-4 Be., 2.1-2.2 ratio, t.c.,	32.05	-
١	persion, same basis	.58		drs., c.l., t.l., works. 100 bs.	26.10 33.10	-
	g.p. copolymer suspension, seme	40	.49	solid or glass, 2.15 ratio, dms., c.i.,	53.30	_
	Poppyseed, Dutch, bgs. Ib. Turkey, bgs. Ib. Potash agricultural (see Potasskum man	.59 .53. riate).		works.	AE DE	.
	works 100 rbs.	13.00		"Ratio" indicates percentage by welch percentage by weight of K.O. Potassium sticofluoride, bgs., c.i., t.i.,	int of SIO ₂	divided
	West Coast, 50% basis, tanks,	10.00		Polassium-sodium tartrala NE gran	.11%	.15
	reg. liake, 88-92%, 400-lb, dms., c.l.,			Polasalum sorbate, LI dray divid to	.80 2.50	1.20 3.10
	Potessium acetate, NF, gran., dms., t.l. works E b. Potessium bicarbonate, tech., gran.,	.90	1.31	Potassium stannate, dms., int. alid., ib.	N.A.	-
	Potassium bicarbonata USP cran	.31	V2 -	min. 50% K ₂ O std., bulk, c.l.,	150.00	160.00
	dms., i.Lb.	.72	-	Potassium sulfate, gran., purif. 400-lb.	. 90	

	_		-1	
_				ــ ا
	Potassium tetraborate, gran., bgs., c.i.			Califood.
l	works,	1.10	-	
	Potassium tetraborate powder 16c. per to Potassium thiocyanate, USP, cryst.	n higher	•	interior Suppris
ı	225-lb. dms. 5-dm lote in	4.01		00 O
H	Potassium titanate, ctns of	.82	:	TrickST.
	WENTEN	.71%	_ 1	SE JYOU
ļ	Potassium-titanium fluoride, tech., dms., t.l., works, frt. squaldib.			(Stone use
ı	rotassium-zirconium fluorida tach	1.24	1.59	KU
- 1	dms., t.l., works, frt. equaldib. Prednisone USP. dms., 5 kilos or	.78	į	1
ì	Prednisone USP. dms., 5 kilos or		-	16
	moregram Prednisolone scetate, USP, dms., 5	1.03	-	
J	kilos or more	1.12	•	W
ľ	kilos or moregram	1.12	-	
				icharia N 1,00
	lots, irt. alid	4.95	5.75	Emil.
	USP, ampula grade, dms. 1 n/n.			Spendy I
1	ib. lots, frt. alldth. Propionaldehyde, tanks, f.o.bib.	4.95 .35%	5.60	3 2010
	Propionic acid. Syn., pure, lanks alva		-	g byrest. Uznani, b
- {	E	.33 .53%	.34%	1 (18) 11 (18)
	n-Propyl alcohol, tanks, divd ib. n-Propyl gallate dms., 100 to 2,000 lb.	.42	.44	100
	n-Propyl-p-hydroxybenzoete, USP,	11.50	-	onsh o
	500 kilos	10.80		acjamide, 2,00
- 1	tech., 500 kilos, f.o.b. kilo Propyl paraben (see n-Propyl-p-hydroxyt	10.36 Senzostal	•	je je aci
	Propyi Uniouracii, dms., 50-kilo lots or			i indi
	morekilo. n-Propylamine, dms., c.i., divd ib.	55.00 .75	.80	9, poe
	Propylene, polymer grade, i.o.b. Tex. and La Gulf Coast points .lb.	.17%		rioti
	chemical grade same basis ib.	.15%	.16	September 1
	Propylene glycol, indust., tanks, f.o.b. lb. USP, tanks, f.o.b. E	.40 .43	.41 .44	cu,
	Propylene glycol monomethyl ether, tanks, divd. E b.	_		25.00 77.00
	Propylene oxide, tanks, f.o.b. works,	.49	•	270 T
	frt. squald	.47½ 1.50	1.75	1 3 1879
	Pumice, dom., fine, 4F-0, bgs., ton			H.Si
	lotston medium, 0½-1½, bgs., ton lots., ton	270.00 300.00	-	Ellex Estab
	coarse, 2-extra coarse, bgs., ton	300.00		hdon
	lots		•	1256
	tota f.o.b. East Coast ton medium, bgs., ton lots. f.o.b. East	280.00	-	.E41
	Coastton	350.00	-	1777
	coarse, bgs., ton lots f.o.b. East Coast ton	300.00		100 2000
	Pyrazolone red (red 38), dms.,	13.00	15 45	7,72
	works		1913	1.0
	pyrethrins, ton lots, irt. alid.lb. Pyrethrum, purif., 20% pyrethrins,	1.91	•	4.0
	dms., works	37.50	37 75	nu.
	Pyridine. refd., 2-deg., c.l., works dms.,	5.90	•	. (4). (4).
	tankskilo	5.70	-	Cest
	Pyridoxine hydrochloride, USP, 100 kilos or more, divd kilo.	36.00	-	·71 k
	Pyrites, Canadian 48-50% S. mines	4.50	500	(1)g
	Pyrogalic acid (see Pyrogalici) Pyrogalici, 100-lb. dms., 1,000-lb.,			75g)
	lots, divdb.	13.70	15 25	14 570
				₹\2
				3.9 394
				135,
				*:1/3
				ii\
	Quassia chips	.57	•	30
	Quinacridone marcon, dms., frt. alid	27.00	35 20	21 ta:
	I red, dms., frt, alld	24.25 24.90	32.30	. %5
	violet, drns., frt. slid	2.00	2.75	A)
	Quince seed, bgs	4.20	4.25	100
	Quining hydrochloride, NF, 1,000-02.	2.45	2.50	195.6 195.6
	Outpine sulfate, USP XVIII, 1,000-oz.		250	41
	I dms. 2.000 oz. or more oz.	2.30 1.49		-740
	Quinoline, dms., t.l., frt. equaldlb. tanks, same basislb.	1,43		N.
				98
				1.34
				430
		-		i i
	R salt tech., 304 molecular wt tb.	2.12	•	in the
	Recemethionine, USP, 50-250 kilos	6.80	•	143
	1 250-500 kilos	6.60 6.50	:	m.
	500 or more kilos	1.07 .58%	.62%	745
	Rapeseed oil, oms.		•	20
	Rauwojna serperiiria root, powa. kijo. dms	22.00 40)	-	1 5
		40) (d)- .40	.42\2	12 1
	I HOSOMUNE LINE COVAL. LOUG N		_	100
	Resorcinol tech., ogs., t.J., vication	3.96	-	8.
	or more workskio.	9.35 0.00	:	
	powd. dms., same basiskilo.	9,90	_	1,0
L .	Resorcinol monoscetale, dms., 1,000 lbs, or more	1.98	-	lon j
by	Rhodemine red toner, morphotoness.	9,25	•	1.
		11.50	14.00 105.10	0.
,	Charles 25 in one	105.00 15.25	-	30
l 1	syn. ams. Ib.	.45	.58 .70	
	powd., bgs	.61 	٠.	00
	Rhuberb root, India, Whose, Justin powd., bgs	34.50 48.50	-	. 13
)	Riboflavin, USP, 25 kilos, divd kilo. Riboflavin 5-phosphale-sodium, 25- kilo.	400.00		· [•
	kilo lois	138.00		្នា
			900	1.44

			The same of the sa			
lb. cids, split)	1.25	-	Sodium bicarbonate, USP, powd., reg. grade, bgs., c.i., t.i., works, irt.		Sodium orthosilicate, tech., anhyd.,	-
odum tart h, roofing.)	rate).		equald		Sodium orthosilicate, tech., hydrated	34.
n, otto. kilo. 5.	700.00	- .	gran , same basis 100 lbs.	17.20 ~	bas, c.l. works, 100 lbs.	27. 26.
kilo 6 ıs. kilo	,500.00 7 9.00	7,500.00 11.00	gran., line, same basis 100 lbs. Sodium bichromate, gran., bos. c. l. i. l	4 = 44	Sodium panjachjorophenate bende	•
kilo Ib. dms.	15.00	17.50	Sodium bitluoride, 400-lb, dms., cl.,	.57 _	bos	
unit-lb.	.21	.23	irt. equald	.78 - .76 -	Sodium pertobarbital (see Pentobarbital Sodium perborate, tetrahydrate, tech.,	sodu
			dms., c.l. 100 he	175.00 - 13.00 -	bgs., c.l., t.l., worksib. Sodium persulfate, 225-lb. dms., 24,060	•
		ì	works, East 100 lbs.	28.50 -	ibs or more, f.o.b. plant ib. 55-lb. bgs. same basis ib. Sodium phenobarbital (see Phenobarbita	
			Works, West	32.00 _	Sodium phenosullonate, powd., dms., ib. Sodium phosphate, anhyd., dibasic	1-500
			basis, works, East 100 bs. soln , 100%, bulk, works, West 100 bs.	20.60 - 20.00 -	tech. bgs., c.l., t.l., works, frt. equald 100 lbs.	
e, dms. lb.	2.50	2.75	photographic grade, 43% soln., works 100 bs.	21.90 -	food grade, same basis, 100 lbs. Sodium phosphate, monobasic, tech.,	54. 57.
ms., less alid. , lb.	3.75	-	Sodium borate NF, gran., bgs., c.l., worksb.	.51 _	same basis 100 lbs. food grade, same basis. 100 lbs.	55 59
/.Y , Ib. Ib.	.50 .78	.60	powd., same basis	.52 –	tribesic, tech., same basis. 100 lbs. food grade, same basis. 100 lbs.	52 63
. bgs. 10.	1.95 1.65	-	1000-5000 ba. worksb. Sodium borohydride, stabilized water	19.86 21.90	chlorinated, same basis . 100 lbs. cryst., tech., same basis. 100 lbs.	31
kiko	1.25 165.00 14.50	1.30 180.00	soin., 12% NaBH., 100% basis, 3000 gal tankwagon, works b. Sodium bromkis, 99%, gran., 400-ib.	17.45 -	cryst., food grade, same ba-	35
kllo	19.00 3.60	21.00	dms., f.o.b. works	1.04 -	USP, dried, powd., bgs., dms., worksb.	
lb. i., dms., plb.	1.07	1.10	c.i., t.i., works	264.00 -	to dms., dry basis, divd (h.	5
c.l., t.l.,	1.23	1.41	Sodium carbonate, monohydrated, bgs., c.l., t.l., works ton		Sodium propionate, dms., 2,000 lbs. or more, f.o.b. frt. alid lb.	
ibs. or	1.33	1.63	Sodium carboxymothyl cellulose (see CA Sodium chlorate, crystol, bulk, f.c., f.t.,	392.00 - 1 vC.)	Sodium pyrophosphate, acid, tech., bgs., c.l., works, frt. equald . 100 lbs.	58
lbs. or	1.68	-	delivored, N.Eton delvered, S.Eton	330.00 - 335.00 -	food grade, non-leavening, bgs., c.l., works. frt. equald 100 lbs.	61
4b. bgs.,			Sodium chlorate, cryst., 450-lb. dms., c l., works. E	.27 _	Sodium pyrophosphate, ferric, dms., c.l., t.l., works	
.80 lbs.	4.02 60.00	61.20	Sodium chloride, tech. (see Salt.) Sodium chloride, USP, gran., bgsta.	.29 _	Sodium pyrophosphate, tetrabasic, anhyd., tech., bgs., c.i., t.i.,	4.5
. 80 lps. ame ba-	4.30	-	Sodium chlorite, tech., dms., c.l., worksb.	1.17 1 27	works, int. equald 100 lbs. bulk, hopper cars, same ba- sis	42
108. 101	2.70 18.00	25.00	Sodium chromate, anhyd., dms., c1., t.l., works	.67	food grade, bgs., c.l., t.l., same ba- sis 100 lbs.	53
s, 100% rks E ton	65.00	98 00	Sodium chromate, tetrahydrate, bgs., c l., t.l., works , lb.	.64 –	Sodium salicylate, USP, cryst., 200-lb dms., 1,000-lb. lois or more.	
ton	90.00 185.00	99.00	Sodium citrate, gran., anhyd., 200-ib. dms., c.l., t.l., N.Yib.	1.95 -	works, frt. equald lb. USP, powd., 200-lb. dms., 1,000-lb.	:
kilo rks, frt.	102.00	-	Sodium citrate, USP, gran., dihydrate, 100-lb, bgs., t.l., f o.b. ship-		fots or more, same basis lb. Sodium sesquicarbonate, bulk, c.l., t.l.,	;
lb. ., 100%	.50	-	ping point	.7472 -	workslon. bgs, c i., t.i. works 100lbs.	170
1b. a, USP,	2.59	-	works	85	Sodium silicate, solid, or glass, 3.22- 3.25 ratio, bulk, c.l., t.l.,	
rks Ib	36.00 1.95	46 50 -	99% min . 200-lb. dms, min., dlvdlb.	.71 –	works 100 lbs. bgs., c i , t.i., works 100 lbs.	1
ib. . iots.ib. s. dms.,	1.94 .301⁄2	- 1	Sodium diacetate, anhyd., dms., c.l., works b, Sodium diacetate, FCC, 50-lb, bgs.,	.68 –	1.95-2.00 ratio, bulk, c.l., t.l., works 100 lbs.	2
lb. 5lb	13.00 10.00	15.00	t.l., divd. E. of Rockies lb. Sodium diacetale, tech., 50-lb. dms.,	.61 .67	bgs., c.l., t.l., works 100 lbs. soin., 37 6° solid, 3.22-3 25	2
ole and	.75	.80	c works lb Sodium eighterbate powd., gran., tt.	.52 -	ratio, bulk, c I , 1 I , frt. equald 100 ib	
ib.	.70 .90	71 1.10	or mixed 11, 1.o.b. shipping	2.60 2.85	Ratio" indicates percentage by weight of Na ₂ O	ght
lb. serican,	1.00	1,20	Prices W. of Denver 2c. per pound hig Sodmin Terrocyanide, bgs, I.I.,	her.	Sodium silicolluonde, bgs., c.l., l.l., works, fri equald 100 lbs.	1
lb. er bgs.,	.55	.56	works	.60 –	Sodium stannate, dms. wks. frt. alid. E.lb. Sodium sulfanilate, dms, works lb.	
lb	.19V2 .18V4	2815 2314	11., works, frt equaldlb. Sodium fluoride, white, 97%, 400-lb.	1.77 -	Sodium sulfate, NF XII. powd., dms , 2,000-ib lots	
99., C.I., h ton	31.00	32.50	dins., c l , works, frt. equald lb. 100 bgs , c.l., samo basis lb.	.6345 – .60 –	works Gulfton Spolium sulfate, West, bulk, c l., works,	9
ton ton	32.00 34.50	33 50 35,50	USP powd., 200-lb. dms., t.l., f o b. shipping point lb.	4.69 –	frt. equald ton bulk, cl.l. East, same basis ton	
ton	37.00 51.50	54.50	Sodium formate, bgs., c.l., works ib. Sodium gluconate, tech., 50-lb. bgs.,	.20 -	Sodium sulfale, photo grade, 100-lb. bgs., c.i , works ton	
s. 99.9%, ton	72.00	75.50	2,500 lbs. or more frt. alidib. Sorlium hydride, oil dispersion, 60%	.60 –	Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt.	
ภ8, m/- ton กร. m/-	79.50	82.50	NaH, 167-lb. dms., 10 dms., works	1.86 -	equald ton liq., 44-48%, tanks, works, frt.	5
ion iO ₂ , 325	104.00	105.00	Sodium hydrosullido. (see Sodium sulfi) Sodium hydrosullilo, tims., c.l., t.l.,	.64 –	equald ton Sodium sullide, flake, dms., c.l., works,	- 51
ston	37.00 34.75	-	f.o.b. shipping point E ib Sodium hydroxida, USP, pellets, 100-	.04 –	E., fri. equald ton bgs., same basis ton	1 4
ms., c.i.,	.50	_	ib. dms., c.l., t.l., works, in. equaldb. Sodium hydroxide, tech. (see Soda, cau	.98 1.06	Sodium sulfide, fused, dms., c.l. works, E., frt. equald tor	1 2
lb.	.36 5.39	-	Sodium hypophosphile, EN grade, 300 lb. tims i.o.b. works lb.	1,425 1,50	Sodium suifite, anhyd., tech. 95-100% bgs. Lo.b. works 100 lbs	
oz. AG/	4.31		I 10 ib. dms	1.47 1.52	Sodium sulfocyanide CP (see Sodium Sodium tetraborale (see Borax).	
OZ	3.23 1.00		Sodium iodido, USP, cryst., 300- to 600- lb. lots. dms. frt. equald ib.	14.72 -	Sodium tetrasulfide. Ilq. 34%, dms. c.l., works., irt. equald tor	1 6
lb. b., рарог	1.35	1.85	Socilum lauryi sulfato, 30%, lanks, f.o.b. works	.29 .32	Sodium thiocyanate, purif., cryst., 250	•
· · · · ton	120 00 83.00	<u>:</u>	Sodium lignin sulfonate, bgs., c.l.,	25.50 -	tech., anhyd. dme., 2,000 fbs. or more, works	7
ogs., c.l.,	150.00	-	Sodium metabisulfite (see Sodium bisul Sodium metaborate, octahydrate,		Sodium thiosulate, tech., photo- grade, anhyd., 100-lb. bgs., c.l., t.l.,	
lon Its tanks,	123.00	-	gran., bgs., c.l., works lb. tetrahydrate, gran, bgs, c.l.,	.38 -	works, irt. equald 100 lbs. cryst. pentahydrate, c.l., t.l., same	. '
.o.b., frt.	175.00	195.00	worksb. Sodium, metallic, 12-lb. bricks, dms.,	.49 -	basis	
tan. rks ton. c.i,	205.00 500.00	225.00 570.00	c.i. works	.93 -	Sodium trichloroacetate, 95%, 50-lb.	
ion. a.l.	520.00	570.00	workslb.	.87 – .70 .80	Sodium tripolyphosphate, tech., bgs., c.i., t.l., works, frt, squaid 100 lbs.	٠,
lon. ns., c.i.,	520.00	-	Sodium metaphosphate, tech. bgs., c.i., f.o.b. shipping pt. frt. equald 100 lbs.	61.50 ~	food grade, bos., c.t., Li., same ba-	•
100 lbs. Ston high	27.50 Br. Prices)	28.50 n West 70c.	foodgrade, bgs. c.l. (.o.b. frt. equald. 100 bs.	68.26 ~	Sorium tungstate, tech, high moly.,	
*-0- 4 30 ((on higher f	or gran. and	I SOMILIM MATERIALISM ATHINGS LUGG. U.S.	27.25 -	dms., 10,800 lbs. or more, frt. slid	
s., c.l. . 100 lbs.	3.35	-3.85	works 100 bs. bulk, c.l., works 100 bs. pentahydrate, bgs., c.l., f.o.b, ship-	25.30 -	more, same bestsib. Sodium-ammonium phosphate, purif	
98., C.L.	.54	_	ping point 100 lbs.	18.95 - 17.20 -	cryst., dms., worksb. Sodium-formaldshyda suifoxylate,	
Fan. 100.	.57	_	works 100 the and overb.	4.87 -	dms., t.l., t.o.b. works	
e powd.,	6.00	6.75	cryst., dms., t.l., same basis lb.	4.12 -	ID. IOS OF INDICE, WILKS	
Ms. 100			Sortem Mitrate 118P, hos., c.i., I.o.b.,	2.00 -	Solvent naphtha, petroleum, straum aromatic, b.r. 320°-350°F.	
W E. Ib.	4.73 1.49	1.50	Sodium nitrate, dom., industrial, bgs.,	34.50 ÷ 284.00 292.00	Now lerses gal.	
ma., 100 ····.kilo,	9.30	10.60	bulk, c.l., workston		Houston gas.	
Hb. 6gs.,	.70%		Imp., comi., 100-lb. ogs., c.i., Av., or	205.00 214.00	Solvent naprina, percieum, sur y n	aro
· b	.83V		bulk, c.l., seme basis tun imn aprigultural, bulk, c.l.,	140.00	New Jersey	
basia ib.	.6614 	-	same basis, ton Sodium nitrite, USP dms., q.l., works, tri. equald 100 bs.		Borbio scid. t.i. dins., divid.	, i.
;	.92	-	III. adversor		December 8, 1986	. 5
				And the same of th		11.
_			The state of the s			

	Sodium orthosilicate, tech., anhyd.,					=
	Sodium orthosificate, tech., hydrated	34.50	- }	ALLERIA		ì
	fisks, dms., c.l., works. 100 lbs. bgs., c.l., works. 100 lbs. Sodium oxalate, 93%, bgs., t.l., works. lb.	27.45 26.25	-	CHEMIC	Δ	L
	Sodium pantachiorophenate, beads c.l., 30,000-lb min lb.	.45	-	A I I MILL IN	,	
	Sodium pertobarbital (see Percobarbital)	.67 .66	-	PRICES	#	
	bos., c.l., t.l., works	.321/2	.361/2	PRIVES		
	bs. or more, Lo.b. nient ib	.63%				
	53-10. bgs. same basis lb. Sodium phenobarbital (see Phenobarbital	60	-	WEEK ENDING DEC 5, 19	986	
	Sodium phosphate, anhyd., dinasic	.76	-	Sorbitan monostearate, dms., c.l., t l., 30,000 lb. min., f.o.b.		
	tech., bgs., c.l., t.f., works, frt. equald 100 lbs.	54.50	-	worksib. Sorbitan tristeerate, c.l., i.l., 30,000 ib.	.76	-
	food grade, same basis, 100 lbs. Sodium phosphate, monobasic, tech., same basis 100 lbs.	57.50 55.75	-	min., f.o.b. works lb. Sorbitol, USP, reg. 70% aqueous.	.80	-
	food grade, same basis. 100 lbs. trassic, tech., same basis. 100 lbs.	55.75 59.75 52.25	52.76	dms., c.l., f.o.b. shipping point	.35	_
90	food grade, same basis, 100 lbs. chlorinated, same basis, 100 lbs.	63.25 31.50	-	tanks, t.o.b. shipping point lb. grandms., c.l. i.i., works ib.	30 70	.74
	cryst., tech., same basis, 100 lbs. cryst., food grade, same ba-	30.50	- '	powd., dms., c.t., t.t., works fb. Soybean meal (See Oils, Fats & Waxes ms	.68 rket repor	.72 t.}
•	USP, dried, powd., bas., dms.,	35.50	-	Soybean oil (See Oils, Fats & Waxes mark Soybean oil acidulated, soapstock, 95% acid, tanks, New York ib.	es report.) .14	.15
'	Sodium picramate, tech., paste, 200-	.19	.20%	Soybean oil, acid, obi., dist., dms ib.	.48 .43	.59 .44
1	b. dms., dry basis, divd lb. Sodium propionate, dms., 2,000 lbs. or	5.50	-	s.d., dms	47 .38	58 43
	more, f.o.b. frt. alld lb. Sodium pyrophosphate, acid, tech., bgs.,	.54 59.05	-	Spearmint leaves, imp., bis	2.50 9.50	2,70
	c.l., works, frt. equald . 100 lbs. food grade, non-leavening, bgs., c.l., works. frt. equald 100 lbs.	58 25 61.25	-	Chinese, 60%	5.60 8 00	2
•	Sodium pyrophosphate, ferric, dms., c.l. t.l., works	.3880	-	Far West, Scotch	18.50 8.00	-
•	Sodium pyrophosphate, tetrabasic, anhyd., tech., bgs., cl., t.l.,	.0000	_	St. John's bread, edible, bis	.29	.30
	works, int. equald 100 lbs. bulk, hopper cars, same ba-	44.75	-	works ib. Stannic oxide, dris., works ib. Stannic oxide, dris., works ib.	N.A. N.A.	-
27	sis	42.50	-	Stannous chloride, anhyd, dms. wks. ib Stannous fluoborate, fig., conc., dms., t.l., works, frt. equald (b.	N.A 2.50	_
•	Sodium salicylate, USP, cryst., 200-lb	53.00	-	Stannous oxido, dms , works ib. Stannous sulfate, dns , works ib.	NA. NA	-
	dms., 1,000-lb. lots or more, works, frt. equald lb.	3.00	-	Stearic acid, double pressed, bulk . ID. single-pressed, bulk ID.	26 28	39 37
	USP, powd., 200-lb. dms., 1,000-lb. lots or more, same basislb.	3.05	-	triplo-pressed, bulk	32 .15	.40 .20
	Sodium sesquicarbonate, bulk, c.l., t.l., works	170 QQ 198.00	-	Streptomycin sulfate, USP, bulk .kilo. Strontium carbonate, glass grd., bgs.	47 (10	-
•	Sodium silicate, solid, or glass, 3.22- 3.25 ratio, bulk, c.l., t.l.,	190.00	_	t I., works lb. Strontlum nitrate, 50-15 bgs., c1,	.3714	-
	works 100 lbs. bgs., c i , t.i., works 100 lbs.	15.70 27 75	-	works 100 lbs. Styrene monomer, 99 6% min., i.c.	51.50	.27
	1.95-2.00 ratio, bulk, c.l., t.l., works 100 lbs.	20 30	-	t.t.f.o.b works	.23 77	.21
67	bgs., c.l., t.l., works 100 lbs. soln 37 6° solid, 3.22-3 25	22 15	-	cryst , bulk, same basis lb clear, same basis lb	.77 .77	.81 .81
•	ratio, bulk, cl, 11, frt. equald 100 ib	6 30		Styrol acetate, dms	2.35	-
85	Ratio" indicates percentage by weight of Na ₂ O	ghiol SiO;	divided by	ht andib. Succinicanhydride.dms.cl.tl.fob	2.00	2 10
	Sodium silicofluonde, bgs., c.l., l.l., works, fri equald 100 lbs.	17.95	19.75	work ib Sucrose, reld_ white, bgs , c l., f o b	1 71	-
-	Sodium stannate, dms. wks. frt. alid. E.lb. Sodium sulfanilate, dms, works lb. Sodium sulfate, NF XII. powd., dms.,	N A. 22	-	Sucrose acetale, isobutyrate, 90%	33.10	-
•	2,000-ib lots	.2312	-	dnis , i i , divd ib tanks, divd ib. 100° o, dnis , t i , divd ib	1 18 1 10 1.18	-
-	works Gulf ton Spdium sulfate, West, bulk, c I., works,	90.00	98.00	Sucrose octa-acetate, denaturing grade, 100-lb dms . f o.b	1.10	-
-	frt. equald ton bulk, cl.l, East, same basis ton	90.00 113.00	101.00 114.00	works kilo Sullabenzamide, dms , 500 kilos .kilo.	12 50 39.50	1350
_	Sodium sulfale, photo grade, 100-lb. bos., c.i., works ton	47.00	53.00	Sulfabenzamide sodium, dms., 500 kilos kilo.	25 00	_
	Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt.			Sulfacetamide, USP, dms , 500 kilos	20.00	23 5
-	equaldton			Sulfadiazina, USP, powd dms., 500 kilos	53.00	-
-	equald ton Sodium suilide, flake, dms., c.l., works,		_	Sulfadiazine-sodium, USP, dms. 500 kilos kilo. Sulfamerazine, USP, microcrystals,	40.70	-
-4	E., frt. equald ton bgs., same basis ton Sodium sulfide, fused, dms., c.l.,	410.00	-	dms., 500 kiloskilo. USP, powd., dms., 500 kiloskilo.	33.50 32.00	-
.06	works, E., frt. equald ton Sodium sulfite, enhyd., tech. 95-100%	240.00	-	Sulfamethazine-sodium, USP, powd. dms., 50 kilos	13.00	_
.50 .52	bgs, l.o.b. works 100 lbs. Sodium sulfocyanide CP (see Sodium t	23.76	_).	Suitamethazine, powder, dms., 500 kilos	9.00	10.0
.06	Sodium tetraborale (see Borax). Sodium tetrasulfide. ilq. 34%, dms.,		•	Sulfamic acid, cryst., bgs., C.I., t.i., works 100 lbs.	38.00	41.0
-	c.i., works., irt. equald ton Sodium thiocyanate, purif., cryst., 250-	• •	-	Sulfamic acid, gran., dms., c.l., t.l., works	.36	-
.32	Ib. dms., 5 dms. or more	3.20	-	Sulfanitamide, NF, reg. 1,000-lb. dms., fri. equald	2.00	-
-	tech., anhyd. dme., 2,000 fbs. or more, works	.97	-	Sulfaniic acid, tech., bga., t.i., t.o.b. works	.67Vz	-
-	Sodium thiosulfale, tech., photo- grade, anhyd., 100-lb. bgs., c.l., t.l., works, kt. equald 100 lbs.		_	dris	8.00	•
-	cryst. pentahydrate, c.l., t.l., same basis100 lbs.		_	vessels Guliports long-ton	118.00 120.00	120.0 122.0
-	Sodium titanate, dms., c.l., works Ib. Sodium trichloroacetate, 95%, 50-lb.	.14%	• -	recovered, divd., Houston . long-ton ex terminal. Rotterdam long ton	120.00 135.00	. 122.0
_ .80	bgs., c.l., frt. alid. E Rb.	.28	-	f.o.b. tanks, Alberta, Canada, for US delivery long-ton dark, ex-Tampa, Fla. long-ton	80.00 182.50	85.0
	t.l., works, frt, squaid 100 lbs. hulk, honcer cars, same basis, 100 lbs.	39.75 37.50	Ξ	Tampa price subject to \$10 per los most customers.	ng-lan disc	ount fo
-	food grade, bgs., c.i., t.i., same ba-	48.50	- .	Sulfur, crude, 99.5% min. purity, comi. flour, 50-tb. bgs., c.i., mines		
- .	Sodium tungstate, tech. high moly., dms., 10,800 lbs. or more, irt.	5.00	5.50	tump same basis 100 lbs.	13.60 13.60	-
-	Folin grade dma., 10,800 lbs. or more, same basislb.	8.00	•	Sulfur, reid., 99.5% min. purmy, ross 50-lb. bags, c.l., mines ba-	47 PF	
<u>-</u>	Sodium-ammonium phosphate, pulli	.62		flour. Fight. 60-lb. bos. same ba-	17.50 20.00	_
<u>.</u>	Sodium-formaldehyde surroxyrate,	.91	_'	Sulfur, refd., sublimed, NF, 99.85% min. purity, 50-lb. bgs., c.l.		. · -
-	Sodium-zirconyt sulfate, dms., 1,000- fb, lots or more, works lb.	.28 16	-	Sulfur, rubbermakers, 99.6% min. pu-	26.00	• -
55.5	tech., drns., any quantity, works ib.	(10	· · · · · · · · · · · · · · · ·	div comi nen 50-in bos		

gal 1.54 squaid chloride, dms. c.i., works, frt. squaid b.
eum, straight aromatic, b.r. 360°Fp, tentes:
pal 1.30 1.35 works.
gal 3.0 squaid b.
sulfur dichloride, dms. c.i., works. frt. squaid b.
sulfur dichloride, dms. c.i., works. frt. squaid b.
sulfur monochloride, dms. c.i., works. frt. equaid b.
frt. equaid b.
r8, 1986 CHEMICAL MARKETING REPORTER

Sulfuric acid, virgin 100% tenks, works,		
East Coast ton	71.75	95.90
Gull Coast ton	75.00	86.40
Midwest ton	80.25	
Southeast	68.15	_
West Coast ton	85.00	_
NOTE: For prices on 60 and 66 Be.		7767 ~
9319, respectively. For price of the	eu (o iurilin)	9 OIBUIA, 1
is, add \$3-\$4 to above prices and		/ 1.043.
Sulfuric acid, smelter, 100% tanks, work		en 00
Guil Coast ton	48.00	52.00
New Mexicoton	20.00	25.00
Southeast ton	63.15	
93%, tanks, divd., Northwest ton	60.00	65.00
Sunflowerseed oil, crude, f o.b. Min-		
neapolislb.	ל141,	.15
Superphosphate, triple, 45% or more,	_	
a p.a., run-of-pile, bulk, c.l.,		
Fia unit-ton	2.75	3 05
bulk gran., c.l., Fla ton	180.00	165.00

	-
T&IC,	dom, grd. New York bgs , c.l., works
Talc,	dom., 99.5%, 400 mesh, mi- cronized, bgs., cl., works ton 625 mesh, micronized, bgs.,

Tale ylong and New York has all	_	
Talc, dom, grd. New York bgs , c.l., works	84.00	-
works	84.00	90.00
cranized, bgs., c l., works., ton 625 mesh, micronized, bgs.,	187.00	238.00
c1, works ton dom, ord. Call. grd., bgs., c.t.,	200.00	-
workston ord Vermont, all-color grd., bgs.,	90.00	-
ci.,works	136.00	-
Talt oil, crude. Southeast, tanks.	70.00	B4.00
works, irt. equald ton Tall oil, retd., acid, same basis ib	90 00 .31	100.00
dist., tanks, same basis	.19	.23
works, frt equald	.201/2 .22	.23% .27
Tallow (see Ois, Fats & Waxes market re Tallow, fatty acids, tech., non-ret.	-	
dma , c.l., divd lb. tanks, divd lb.	.37 .29	.40 .45
hydrogenated, tech., flake, bgs., c.l., dhd	.37	.33
tanks divd	.35 8.50	.42 9.50
Tankage, animal feeding, 9-11%, NH ₃ .	52.90	-
New York, bulk unli-ton Tankage, lert, grade (see Nitrogenous pr	5.50 oceas tani	- (age).
Tennic acid, NF. Ruffy, bbis., 1,000-lb.	6 09	_
tech., powd., dms ib. Tar acid od. 15-18% t.f., dms., f.o.b	4.52	-
works	1.40 1.59	-
50-53% t1, dms, t.o.b. works, gal Tartaric acid, NF, bqs	1. 87 1. 20	1.50
Tellurium metallurgical, f.o.b. works ib. Terpinhydrate, NF, imp., cryst., powd.	12.00	-
36 kilo drums, f.o.b. ship. pt., frt. equaldlb.	1 35	_
Terpineol	1.10 2.40	1.50
prime, dms	1.35 4.50	2.05
Terpinyi propionate, dms lb. Tetrach'oroethylene, tech (see Perchlor Tetrachloroethylene, USP, dms, c1		
t I works	.3014	
Tetraelhylene glycol, tanks, irt. alid ib.	1.53 .67	1.66
Tetraethylene glycol diacrylate, t.l. dms f o.b. works,	1.50	-
Tetraethylenepentamine, lanks, same bass	1.70	1.75
Tetraethylthiuram disulfide, tech., flake,dms.,t.l.,fri.aldib. Teirahydroluran dms.,c.l.,t.l.,f.o.b.	.68	2.07
works	1.02 .96	-
Tetrahydrofurfuryl alcohol tanks, f.o.b.	.90	_
Memphis, Tenn	7.20	-
C1.t.i f o.b. worksib. Tetrapolassum phosphate (see Potassum	.65 Ohosokale	. tetrebasici
retrasodum pyrophosphate (see Sodii (etrabasic)	um pyroph	osphale.
Thallum metal, divd	35.00 140.00	-
Theophyline, USP, arrhyd, 50-kilo	140.00	150.00
dms . 10,000-kilo lots kilo	12.00	12.95

dms ravd hulo.

Thiamine mononitrate, USP, 100- kilo.,
dnis., dvd hao
Throdiphenof, 98%, dms., f.o.b.

Thorium nitrate, puril., dms., 100-lb.	2.75 128.00	<u>.</u>	Turmeric, Allepp Turpentine, crut Southea
di-Threonine, dms 10 kilos wks kilo.		_	
Thyme leaves, French, bgs lb.	1.45	-	
Spanish, bgs	.75	-	155
Thyme oil, NF, red, dms kilo	20.00	-	
NF, white, drns klio	22.00	-	
Thumal NF	3.75	6.15	
Thymal lodide, dms., 100-lbs. f.o.b.			
worksib.	52.30	56.20	ì
Tin metal (NY composite) ib.	N.A.	_	
Titanium dioxide, arialese, bgs., 20-	14-14.		University of the later
	.77	.79	Ultramarine blue
ton lots, frt. alid lb.	.,,	.15	(b,-lots, v
slurry shipments, 50-ton lots, dry ba-	70		violet, same b
sis, irt, alid b.	.78	-	Umber pigment
Titanium dioxide, rutile, reg., bgs., 20-			equald
ton lots, frt. alid lb.	.81	.84	raw, America
giurry shipments, 50 ton lots,			same ba
dry basis, frt. alld	.84	_	Undecylenic aci
Non-chalking ruttle material costs 1c.p	er pound m	cre.	Urea, 46% N,
Titanium hydride powd. electronics	- p		50-ton c
grade, dms b.	26.50	_	46% N, agric
	EQ.UU		Gulf Cos
Titanium tetrachloride, tech., bulk, c.l.,	.30	.35	46% N, agricultu
f.o.b. works		.00	nais, gra
200-gel cylinders cl., same basis ib.	.50	-	Uva-Ursi leaves
Titanium sponge, 99.3%, fiber drums,			CANDON IS INSIDE
less than 5,000 lbs. f.o.b.			
wkslb.	4.85	-	
Tables sold 2 000 the or more in	2 45	_	

Titanium hydride powd. electronics	-	
grade, dms b.	28.50	
Titanium tetrachloride, tech., bulk, c.l.,		
f.o.b. works lb.	.30	
200-gel cylinders cl., same basis ib.	.50	
Titenium sponge, 99.3%, fiber drums,	.00	
less than 5,000 lbs. (.o.b.		
	4.85	
wks		
Tobias acid, 2,000 lbs. or more lb.	2.45	'
d-a-Tocopherois, 67%, dms kilo	50.08	
d-a-Tocopheryl scatale, 81% conc.,		
dimskilo	57.4 9	
dmskilo d-a-Tocopheryl acid succinate, cryst.,		
dmakilo	78.44	
di-a-Tocopherol, dmskilo.	27.40	
dt-a-Tocopheryl acetate, USP 50-kilo		
dm. 1000 kilo min kilo.	16.00	18
50% dry powd., 50-kilo dm kilo	17.00	
Tolubalam, cnaib.	7.60	8
Toluene, petroleum, ind. or nitration, tan		•
Atlanta, Ga., divdgal.	.70	
Bayonne, N.J., divd gal	.70	
	.7 0	
Baylown, Tex., (.a.b gel.	.70	
Chicago, III. divd gal.		
Clairton, Pa., f.o.b gal.	.70	
Deer Park, Tex., f.o.b gal.	.70	
Ft Wayne, Ind. divd gal.	.70	

	Baylown, Tex., Lo.b gal.	.70	
	Chicago, III. divd gal.	.70	
	Clairton, Pa., f.o.b gal.	.70	
	Deer Park, Tex., f.o.b gal.	.70	
	Ft Wayne, Ind. divd gal.	.70	
- 1	Guil Coast, spot, barges · gat.	.69	
	Houston, Tex., dvdgal.	.70	
	New Jersey Mairo, divd gal.	.70	
	Philadelphia, Ps., dlvdgal.	.70	
	Providence, R.I., divd gai.	.70	
	Toluene di-isocyanate (mixed isomers),		
	80%, 2,4- and 20% 2,6- isomers,		
	jumbo tankcars, divd lb.	1.01	
	p-Toluenesulionemide, powd., dms.,		
	t.l., works	3.55	
ı	m-Tolwidine, tech., bulkb.	3.10	
	o-Toluidine, tech., iiq., dms. c.iib.	.72	
- 1	bulk, same basis	.60	
_	p-Toluidine, tech. cast solid.dms.,		
1	ci.,worksib.	1.80	1
-	Liq., tanks, same basis ib	1.70	
Į	flake, same basis	1.95	
1	Toluidines mixed, o-m-p, tech., liquid,		
1	c.l. f.o.b. works lb.	1.03	
1	bulk same basis	.95	
-	Tolyitriezole, drns., 1,000-lb. lots, f.o.b.		
ļ	Cincinnati, Ohio ib.	2.90	
	Tonka beans, Angostura, prime,		
	1,000-lb. lots lb.	6.50	
	Toxaphene, dms., c.t., t.l., works ib.	.38	
	Tragacenthgum, No. 1, ribbons, cns. fb.	38.00	40
	flaked powder	12.50	15
	Triacetin tanks, divd. E b.	.76	
	Tributyl carate, t.L. drums, f.o.b.		

r	Dulk same basis	.95	-
	Tolyitriazole, dms., 1,000-lb. lots, f.o.b.		
١.	Cincinnati, Onio	2.90	-
Š	Tonka beans, Angostura, prime,		
•	1,000-lb. lots lb.	6.50	-
2	Toxaphene, dms., c.t., tl., works lb.	.38	
3 2 0	Tragacenthgum, No. 1, ribbons, cns. fb.	38.00	40.0
ñ	flaked powder	12.50	15.0
•	Triacetin tanks, divd. Eb.	.76	-
	Tributyl carate, t.l., drums, f.o.b.,	4 20	
	Tributyi phosphate, tanks, works ib.	1.70	1.7
	Tobutdamon data of days	1.65 1.39	1.7
	Tributylamine, dms., c.l., divdlb. tanks, same basislb.	1.33	-
	Trichloroscetic acid, tech., 300-lb.	1.33	-
	dms., c.l., i.o.b , works lb.	.94	
	USP, 100-lb. dms., int. equald lb.	.991/2	-
	1,2,4-Trichlorobenzene, pure, tanks,	.59 72	-
	divdb.	.611/2	_
	1,1,1-Trichlorosthans, tanks, con-	.0142	_
0	sumers, divd	.401/2	
	1,1,2-Trichloroethane, tanks, f.o.b.	.4072	
	workslb.	.42	_
	Trichloroethylene, tanks, divdlb.	3814	
	Trichioroisocyanuric acid, dms ib.	1.25	
0	Trichlorophenoxyacetic acid (see 2.4.5-1		
	Tricholine citrate, 65%, soln., non-ret.	•	
5	i dms., 1,500-lb. lots, divd lb.	1.35	
	Tricresyl phosphate, tanks, f.o.b.		
	worksb.	1.60	1.7
	Tridecyl sicohol, mixed isomers, tanks,		
	l divdin	.57	
	Triethonolamine, 85%, tanka, divd. E. ib.	.35	
56	1 99%, tanks, same basis	.35	1
	Triethanolamine fauryi sulfate, tanks,		

.2714 1.33 1.20

f.o.b. works...

Triethylamine.dms.,cl.,dlvd.....lb.

Friethyleneglycol dipelargonate, tanks 1.o.b. works b. 40-60% tanks, 100% basis, frt.

Trimethylamine, anhyd., tanks, frt. equald., 100%....b. 25% soln., tanks, frt. equald., 100%

basis....ib 40% soin., tanks, fri. equald., 100%

Trimethylolpropane bgs c.t.t.l.divd. b.
Trimethylolpropane theorylate, t.l.
dms. I.o.b. works b.
Tripentaeythildol, tanks, frt. alid., E. b.
Tripentyl phosphate, dms., t.l., frt.
equald. b.
Tripropylene glycol tanks, frt. alid.
E. b.
Tris-thydromethyl) nitromethane, solid.
11. works b.
Tristollymphosphate free Scribes phosphate.

basis. . . .

opropandismine, dms., c.i., irt.

- -	AA		
-	Market a series	_	
-	Warfarin 0.5%, dms., ton lots, frt. slid.		
	I New York or Chicago. In	.75	_
-	YVNEST GERM OIL, COID-DIESSED OR	16.50	17.50
		14.00	
-	Write precipitate, USP, powd., 100-in.		
.45	dms., f.o.b. works ib.	7.892	11.24
.55	I Whithi (see Caldum carbonata)		11.24
-	Wintergreen Oil, Byth (see Methyl gelicula	ital	
	Witch hazel bank, bis	1.35	
-	leaves, bis		-
	400 mesh, bgs., c.l. works ton	1.75	-
_	326 mash bas a lawaras 101	134.00	-
-	325 mesh, bgs., c.l. works ton	117.00	-
	high aspect ratio, bgs., works ton	164.00	-
-	Wollastonite, t.l., t.o.b., producing		
	plant, general grade ton	200.00	_
.57	i ozo mesnina	140.00	141.00
-	t 400 mesh ton	180.00	-
	1250 mashton	500.00	_
	Woolgrasse LISP/cont ecosion		-

madium exytrichloride, 3.000 lb.

5.40

4,10

27.00 6.25 4.75 .64 60.50 63.00 49.00 18.00 26.50 34.00

41.00

18.70

10.75

15.60

8.00 9.75

12.75

6.20

30.00

5.00

Vanadum Oxyrichionde, 3,000 to.
cyls., works......b.
Vanadum pentoxide, tech., gran., per lb.
of V₂O₄, 550-lb. dms., works...b.
fused or flake, per b.
V₂O₅, 550-lb. dms., works....lb.
Vandyke brown, bags., i.i., frt. equald. lb.
Vanilla beans, Madagascar....lb.
Java. tins......b.

/etiver cil, Bourbon, dms. 1b. Chinese 1b. Halian 1b.

Virignotiene, Duik, 1.0.b. 10.
Vitamin A, synthetic, dry, pharm., 500,000
A units per grm., 50-kilo., lots., kilo
Vitamin A, Bq. in oil, pharm., 1,000,000 A
units per gram, 10 kilo lots. , kilo
Vitamin A, feed grade, 650,000 units

cium phosphate, 25-kso dms. kilo. /Itamin B₁₂, 0.1% trituration of cryst. B₁₂(cyanocobalamin USP) with mannitol, 25-kilo, dms....kilo. Vitamin B₁₂, cobalamin concentrate NF with mannitol. 1,000 mcg, per dram. dms.... per gram activity

with mannitol. 1,000 mcg, per gram, dris, ... per gram activity 19.45
Vitamin B₁₂, 1% Vitamin B₁₂, USP, absorbed on resin. 5-kilo dms., 500-gram lots, fr.alid, per gram activity 15.85
Vitamin B₁₂, 1% cobalamin concentrate, NF, absorbed on resin, 5-kilo dms., frt. alid, per gram activity. 15.40
Vitamin B₁₂, 1% cyanocobalamin in gelatin. 2.5-kilo dms., frt. alid........... per gram activity 15.40
Vitamin C (see Ascorbic acid). Vitamin C (see Cholecatiferoi)
Vitamin D (see Cholecatiferoi)
Vitamin E (see a-Tocopheroi and Wheat germ oil). Vitamin H (see Biotin)
Vitolatine T (see Methyl violet toner)

2-Vinylpyridine t.l., dris. works. tanks, works

nviioluene, bulk, 1.o.b.

-	Wintergreen oil, syn. (see Methyl sellcyk	ite).	
	YYILCH HAZEI DANK, DIS	1.35	_
-	leaves, bisib.	1,75	_
	400 mesh, bgs., c.l. works ton	134.00	_
-	325 mesh, bge., c.l. works ton	117.00	-
	t TIME BEOBELLENIN PAR MORES CON	184.00	_
-	AACHBEICHIES, C.J., T.O.D., DEOGUCING		
	PIUNT, CIBNORAL CONCIO	200.00	_
.57	325 meshton	140.00	141.00
-	400 mesh ton	160.00	-
	1250 meshton	500.00	-
•	Woolgrease, USP (see Lanolin).		
-	Wormseed oil (see Chenopodium oil, NF	•	
	Wormwood os, cns	31.00	-
.78	the second secon	بالريات	اربضارك
•	1 🛋		
)			
6.00			
.33			
	Xenthan cum, food 300-ib, done it o b		
	I revenuelle less allen ame tak		

ppey over 6% ib. ude sulfate tanke, f.o.b. aat works gal.	.69 .70	.80	Xylene, petroleum, Ind. or nitration, tanka Alliance, La., f.o.b
ue pigments, 550-2,000	4.60	اندالپرسر	Bayonne, N.J. 1.o.b. gal. Baytown, Tex., 1.o.b. gal. Chicago, III., divd. gal. Clairton, Pa. gal. Ft. Wayne, Ind., divd. gal. Guif Coast, apot, barges gal. Houston, Tex., divd. gal. New Jersey Metro, divd. gal. Xylene, petroleum, Ind. or nitration, tanks
, works	1.30 2.20	-	I Philadelphia Paudivit ou
nt, burnt, American, frt. b. Ican, dom., bgs., l.c.f.,	,131/2	.151/2	Providence, R.I., divdgal. South Bend, Ind., divdgal. m-Xylene, high purity, tanks, f.o.b. Texas City, Tex lb.
)88)s	.1312	144	I C-Aylerie, tanks, works
cid, dms., worksib. , ind., bulk, Gulf Coest,	2.70	-	p-Xylene, tanks, divd
c.lton icultural, barges, f.c.b.	200.00	-	l works
cast, granular ton	75.00	80.00	2.4-Xylidine, tech., liq., c.l., t.l. t.o.b. works
es, bis	100.00 .22	:	Xylidines, mixed, o-m-p., dms., c.l., t.l., f.o.b. works

	Clairton, Pa	.76\4 .76\4 .76\4	:
	Guir Cozzi, apot, bargesgal. Houston, Tex., divdgal. New Jersey Metro, divdgal. Xylene, cetroleum, Ind. or nitration, beste	.78½ .76½ .76½	
1/2	Philadelphia, Pa., divdgal. Providence, R.I., divdgal. South Bend, Ind., divdgal. m-Xylane, high purity, tanks, f.o.b.	1.35 1.42 1.37	:
34	Texas City, Tex	.38 .134 .19	-
)	works	1,70 1.60	-
_	f.o.b. works lb.	1.00	-
	<u>Y</u>		
	Yara yara, 25-ib. cnsib. Yeest, pure brewer,s debittered, NF, Sac-	2 81	-
	charomyces, 1.l., f.o.b. works . ib. Yerba, santa leaves, bis ib.	1.10 2.40	-
	extre, bots	26 50	31.75

Yeast, pure brewer, a debittered, NF, Sac-	
charomyces, 1.l., f.o.b. works . ib. 1.10	ŀ
Yerba, santa leaves, bis ib. 2.4)
extre, bots ib. 26 %)
Ylang-ylang oil, extra grade	Ò
grade 1	0
grade 2	
grade 3 b. 220	
والمراجعة والمراجعة والمراجعة	_
	_

Zein, bgs., 2,000-lb. lotslb.	7.50
Zinc acetate, NF, dms,	1.00
tech., dihydrate, bgs., t.l., works. lb.	1.60
Zinc borate, tach., 43% ZnO, 37%	
B ₂ O ₃ , 50-lb. bgs., 20,000-lb. t.l.,	
1.o.b. workslb	.55
cryst , 37% ZnO, 49% B ₂ O ₃ , 250-b.	
dms. 20,000 lbs. t.l. t o.b. wks. lb	.89
Zinc chioride, USP, gran., dms kilo	9.79
Zinc chloride, tech., soin. 50%.	•
tanks, f.o.b. Cleveland.	
Ohlo 100 lbs	20 20
Concord, N.C 100 lbs	20.20
Freeport, Tex 100 lbs.	20 20
Old Bridge, N.J 100 lbs.	20 20
65 degree, same basis Cleveland.	
Ohio 100 lbs.	27.90
Concord, N.C 100 lbs.	27.90
Old Bridge, N.J. 100 lbs.	27.90
70 degree, same basis Cleveland,	
Ohlo 100 lbs.	29.70
Concord, NC 100 lbs.	29.70
Old Bridge, NJ 100 bs.	29.70
72 degree, same basis Cleveland,	
Onlo 100 lbs.	33.20
O/10 100 m/s.	

Concord, NC 100 lbs.	29.7
Old Bridge, NJ 100 bs.	29.70
72 degree, same basis Cleveland,	
Ohlo 100 lbs.	33.20
Concord, NC 100 lbs.	33.20
Old Bridge, NJ 100 lbs.	33 20
Zinc chromate, bgs., dlvdb.	1.13
Zinc cyanide, dms., c.l lb.	1.69
Zinc dust pigment type 1 & 2, dms., c.l	_
f.o.b. plant	.59
Zinc ethylenediamine tetracetic acid.	
8.4% Zn., ammonia salt soin.,	_
t.c., t. t., f.o.b. works lb.	.50
9% Zn., ammonia sait 60in., t.C., t. t.,	
f.o.b. works	.4
Zinc (luphorate lip conc. dms., t.l.,	

214

470

382 375

ING HUDDONALE, MG. CONC., CINES, S.S.	.66
works, frt. equald lb.	
inc metal, high grade, divd ib.	.47
inc moth, ngirginado, and 7n ding	
inc naphthenate, Ilq. 8% Zn. dms.,	.95 34
divd	.02
inc nitrate, tech., flake 300-lb, 0ms 10	34
inc oxide photo conductive, bgs., c.l.,	
THE OXIDE BLOCK COLUMN AND A SELL	.50
frt. alidb.	
inc oxide USP 50-lb, DXB., C.L., ITC.	en
alidib.	.59
inc oxide pigment, American process.	
AC OXIGE DISTURBULY VILLEURING IN COORSE	.57
lead-free bgs., c.l., frt. alid ib.	
inc oxide oloment. French process	.55
regular bos. C.L., ITL apg ID.	.30
negularidades outle orali-	
tuc buguosanionare, banin a	(,82
inc phenoisulfonate, purif., gran., 250-b. dms., t.l., in. allo ib.	
inc curidinathiona. 48% (1808/844)	8.50
drns., f.o.b. works lb.	9.50
Urila., 1.0.0. Works	14.50
Industrial grade	
unc resinate precip. 7.2-7.6% Zn.	45

dma., frt. alidb.	.43
works	.17 .92
dust. grade 36% Zn., bgs., c.l.,	30.00
eame basis 100 bs.	28.50
works	.42 4.67
c-formeldehyde sudjoxviale, basic	4.05

nc-ammonium chloride. bgs., C.I.,	46
p	.42
worke	4.67
inc undecylenate, dms., works b.	
	1.05
SUUTH VIME ILL SIM.	165.00
roon gran. bgs., bulk c.l., works. ton	100.00
FOOT Grent Dyb., Dulk Com 925 mesh.	
roon milled bgs., 200 and 325 mesh,	228.00
	.97
	76
22% ZrO _s , same basis.	
22% ZrOs, BEITIE DISSIB.	
	31
	•
	4.25
	7.25
2,000 lba. min	. 7.29
insulating, stabilized, 325°F same	3.51
	-10
URDIO	

CENTRIFUGES

CENTRIPUGES

15410 Sharples, 316 S/S RECONDITIONED
15400 Sharples, 316 S/S, (5)
15500 Sharples, 316 S/S, RECONDITIONED
15500 Sharples, 316 S/S (2)
15500 Bird, 304 S/S, reconditioned by mfr.
157500 Bird, 304 S/S, 10° contour
15750 Bird, 304 S/S, 10° contour
157500 Bird, 304 S/S, 10° contour
15750 Bird, 304 S/S, 10° con 130WH-3036 Westfalia, sanitary., S/S 130WH-3036 Westfalia, Pilot Plant 3 way S/S Sharples "Tornadomatic" 316 S/S (2) # Sharples "Turriadomatic" 3 To 3/3 (2) # Tothurst, "Batch Master", S/S (2) # Sharples "Sludge-Pak" Model SP-6500, 316 S/S # Western States, "Sludge-A-Tron", 316 S/S, (3) Baker-Perkins, pusher design, 316 S/S M'ATAM suspended centrifuge, 304 S/S 5 H.P. 12 Krauss-Mattel, pusher designed, 316 S/S 17 Baker Perkins Pusher Design, 316 S/S

SZEGVARI ATTRITOR al Szegvari, jacketed, stainless steel

MM Alfa-Laval pusher design, 316 S/S

PRESSURE FILTERS

柳帆 ft. Durco-Enzinger, Model 60DHC489, 316SS 邢帆 ft. Niagara Model 370-348, 304SS 1228 sq. ft. Funda Model R-30, 316 S/S, iktd.. 40 HP

VACUUM FILTERS

Tris' Ametek, 318 ELC S/S LIKE NEW CONDITION full Eimco, precoat "Eimcomet" construction (3) Na Ametek, polypropylene Na Paxman, 316 S/S, precoat 1812 Elmco, 316 S/S, precoat

REACTORS-TANKS

G/L Reactors, up to 5000 gal. capacity, htsup to 15,000 gal. capacity (100's in stock) (S/S, G/L, C/S, FRP)

HORIZONTAL BELT FILTERS

itil Eimco, rubber belt, vacuum (2) iti? Eimco, rubber belt, vacuum (2) Itil Skalghtline, rubber belt, complete IT Skalghtline, rubber belt, complete d Elmco, rubber belt, complete

BELT FLAKERS

୬ 'tử' Sandvik, S/S beit tlaker, complete ୬ 'tử' Sandvik, S/S, complete system

FITZ CHILSONATOR

⁴⁸ 16 x 30 Fitzpatrick Chilsonator System, all S/S fluction, with size 30 granulator, with drives

BALL/PEBBLE MILLS

d Patterson Jacketed Steel Ball Mill, 30 H.P. of Patterson Pebble Mill, aricite lined

SAND MILLS

AS Premier Sussmeyer Sand Mill, complete
Monetouse-Cowies Sand Mill, 50 H.P. ehouse-Cowlos Sand Mills, 25 H.P. (2) *Chicago Boller "Red Head" 30 H.P. *Chicago Boller "Red Head," 1 H.P.

LAB 3 ROLL MILLS

Tit?" J.H. Day, high speed, complete fit king Ross, high speed, complete fit Kent, high speed, complete

LL NICKLE CONSTRUCTION

Mal Nooter Reactors, 30/50 PSI (2) Asq. ft. U.S. Autojet Pressure Filter Sparkler Pressure Fliter, Model 33-9-19 Ametek Rotary Vacuum Filter

JUST PURCHASED

7500 gal. Terre Haute Fermenters, 304 S/S, 50 psi (5) 4000 gal. horizontal batch still, S/S 4000 gal. norizontal batch still, 5/3 2500 gal. Hicks tanks, 316L S/S, 50 psi or F/V 2000 gal. Nooter reactors, 316L S/S, 60/90 psi 2000 gal. Pfaudler reactor, 316L S/S, 60/90 psi 2000 gal. Mueller reactor, 316L S/S, 60/90 psi 2000 gal. horizontal batch still, S/S (2) 1250 gal. S/S Mix Tanks, 10 HP Vari- Drive (2) Misc. G/L tanks and kettles, to 3000 gal. (8) ST 100 Aeromatic Fluid Bed Dryer, all S/S

ANALOGINAN TUTTUTTORING AND TOTORING AND TOT Antish Standard Stand

RESIN MFG. EQUIPMENT—

OHIO LOCATION 300 gal. Struthers-Wells Reactor System, 347 S/S, 50 PSI or full vacuum internal, 75 PSI jacketed, 700°F,

turbine agitator, with condensor, receiver, piping, 15,000 gal. Stainless Steel Tank, vertical, with interna

colls, top entering 40 H.P. turbine agitator 200 gal. Baker-Perkins Mixers, size 17GIM, type 304 stainless steel construction, fully jacketed, duplex dispersion blades, screw tilt, 40 H.P. (5)

35 gal. Patterson "Kneadermaster" Mixers, 304 stain-less steel, sigma blades, Jacketed, 40 H.P. (5) 100 H.P. Sprout-Waldron Hammermills, Model CG-26 (5) 28" dia. Reitz Thermascrews, 304 S/S, Jacketed trough

28' long, 15 H.P. varidrive (2) 40"x84" Patterson Screens, 1 deck, S/S (9) IMMEDIATE AVAILABILITY-CALL FOR DETAIL!

NEW LIQUIDATION

PVC Suspension Plant Ohio Location 11-5,000 gal. Plaudier Reactors, C/S construction, rated 220 PSI internal, 80 PSI jacket, 50/25 H.P. Philadelphia Gear Drive

Complete Nara Vertical Fluid Bed Dryer System, all S/S, 6'7" x 22'1", 2 stage, rated up to 10,000 #/hr., with

heaters, blowers, cyclones Complete Proctor Vertical Flash Dryer System, all S/S, 3'1'

x 117'2", with heater, blower cyclones
20,000 gal. Stainless Steel Mix Tanks, 13'6"x19', 20 H.P. (2)
16,000 gal. Stainless Steel Mix Tank, 12'x18'4", 10 H.P. (1)
15,000 gal. Stainless Steel Mix Tank, 9'6"x27'6" 40 H.P. (1)
8,500 gal. Stainless Steel Tank, 9'6"x15'2" (1)
8,000 gal. Glassote Vacuum Receiver, Glassolined (1)

8,000 gel. Glascote Vacuum Receiver, Glass-Lined (1) 6,500 gal. Glascote Vacuum Receiver, Glass-Lined (1) 2,250 gal. Stainless Steel Kettles, 6'8"x8', jacketed, 10

2,250 gal. Stainless Steel Kettles, 6'8"x 8', jacketed, 3 H.P.

2,000 gel. Stainless Steel Mix Tanks, 6'x8'4", 2 H.P. (3) 1,000 gal. Stainless Steel Kettles, 5'4"x6', jacketed, 2 H.P. 1,000 gal. Stainless Steel Jacketed Tanks, 5'4"x6' (2) 4-A.O. Smith Silos, Glass-Lined, 14'x40', bolted

1-Butler, Epoxy-Lined, 9'x32' welded 220 CFM Sullaire Compressor, 125 PSI, rotary screw design 117 sq. ft. Milkro Pulsair Collector, Model 25S-6-30, S/S Derrick Screen, single deck, 3'x5' Misc. tanks, feeders, blowers, cyclones, pumps

REACTORS

5000 gal. Struthers-Wells, 347 S/S, 50#/75# 3300 gal. Acme, 304 SS, 74#/76# (2) 2750 gal. Acme, 304 S/S, 74#/36# (2) 2000 Colonial, 316 S/S, 100#/100#, w/coil 2500 gal. Cryochem, 316 S/S, 75#/75#, with coll 1600 gal. Perry Products, 316 S/S, 75#/150# 750 gal. Plaudier, Glass-Lined, 100#/90# 200 gal. Plaudier, 316 S/S, 55#/60# UNUSED

200 gal. Pfaudier, 316 S/S, 55#/60# UNUSED 50 gal. Pfaudier, Glass-Lined, 25#/80# complete sys-tem, with receiver & condenser 30 gal. Pfaudier, 316 S/S, 60#/90# UNUSED 30 gal. Pfaudier, Glass-Lined, 25#/90# 10 gal. Pfaudier, Glass-Lined, 150#/85# 5 gal. Pfaudier, 316 S/S, 50#/80#

S/S PULVERIZERS

60 ACM Mikro Mill, 75 H.P. PC-38 Strong-Scott Pulvacon, 150 H.P. FASO-20 Fitzpatrick "Fitzmill", 75 H.P. (1) D-6 Fitzpatrick "Fitzmill", 7½ H.P. (2) Manesty "Rotogran" Oscillating Granulator

UNUSED NIRO DRYERS

33' dia. Niro Spray Dryers, 316 S/S, UNUSED (2) complete spray drying facility, never installed, including (2) 33' dia. chamber, Model F-350 centrifugal atomizers. All equipment new 1978, as shipped from Niro awaiting installation.

10' dia Niro Fiuld Bed Dryer, 304 S/S, UNUSED, com-plete system with drying chamber, heating-cooling systems, leed tanks, cyclone collectors, all piping.

VACUUM DRYERS

375 cu. ft. Stehning, Double Cone, S/S (9)
175 cu. ft. Venuleth, Double Cone, S/S (3)
60 cu. ft. DeDeltrich, Double Cone glass lined
50 cu. ft.F.J. Stokes Double Cone, 304 S/S
40 cu. ft. F.J. Stokes, Rotary, Vacuum, 30"x8", S/S 21 cu. ft. Balfour, Double Cone, glas lined 20"x10" Zimmer dble. screw Holofilites, S/S jktd.,vac. (3)

MIXERS

.50 gel. B-P, C/S, Sigma Jacketed vac., 30 H.P. ¾ gel. J.H.Day "Titan," Sigma Jacketed, 3 H.P. 70 cu. ft. fJ.H.Day, Nauta, S/S, Jacketed, UNUSED 200 gel. B-P, C/S, sigma, Jacketed, vac., 75 H.P. (3) 75 liter Papenmeir Mixer, S/S, Jacketed, 30 H.P. varidrive 8 cu. ft. Kelley Duplex, paddle, S/S, NEW 3.5 cu. ft. J.H. Day, Nauta, S/S

DISPERSERS

50 H.P. Cowles, vari speed. Like New

LAB 2 ROLL MILLS

8"x16" Reliable Lab Mill, 15 H.P., Like New 8"x16" Farrel Lab Mill, electrically heated, variable speed, variable friction 6"x13" Farrell Lab Mill, 10 HP drive 3"x7" Farrell Lab Mill, oil heated, variable speed

LITTLEFORD MIXERS

FKM 8000 D, 169 cu. ft., carbon steel, 4choppers FKM 8000 D, 169 cu. ft., carbon steel KM 4200 D, 86 cu. ft., jacketed, stainless steel FKM 3000 D, 65 cu. ft., jacketed, stainless steel KM 2000 D, 43 cu. ft., jacketed, steinless steel FKM 600 D, 13 cu. ft. stainless steel w choppers (2) KM 300 D, 6 cu. ft. stainless steel FM 50, 1 cu. ft. stainless steel jktd., vac chopper, 5 H.P., vari drive, All XP. New Condition.

S/S RIBBON BLENDERS

150 cu. ft. Areco, 40 H.P. 13 cu. ft. J.P. Devine, 3HP

ROSS PLANETARY MIXERS

40 gal. Ross, HDM-40, S/S, jacketed, vacuum, 10 H.P.

25 gal. Ross, HDM-25, S/S, 15 H.P. varidrive

EVAPORATORS

50 sq. ft. Artisan "Roto-therm" Evaporators, all S/S construction, F/V internal, 150 PSI jacket (2) 4sq. ft. Kontro Adjust-O-Film S/S 1 sq. ft. Artisan "Rototherm" Lab System, all S/S

COMPACTING PRESSES

6½ ton Manesty, Model BB3A, 27 station 6½ ton Manesty, Model BB3A, 33 station 4 ton Manesty, Model F-3, single punch

REFRIGERATION

200 ton Lewis Package Chiller, complete
30 ton Application Engineers, Package Chiller
15 ton Application Engineers, Package Chiller
10 ton Application Engineers, Package Chiller
7 ton Mayer Package Chiller
5 ton Peuchen Package Chiller, (2)

SCREENS
48" Sweco, \$/\$, 2-deck
30" Sweco, \$/\$, 2-deck
18" Kason, \$/\$, 1 deck, unused (3)
36"x96" Rex-Carrier, 1 deck, \$/\$ (4)
20"x48" Rotex, 1 deck, \$/\$

HEAT EXCHANGERS

2000 sq. ft. surface area-dozensi

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LIQUIDATION SALE

LARGE **POLYSTYRENE** PLANT

ILLINOIS LOCATION

21899-Pfaudier Reactor, 1,500 gal., 316L SS dimple jkt. 21896-Pfaudier Reactor, 10,000 gal. 316L SS clad, 60

HP.(4) 21900-Plaudier Reactor, 15,000 gel. 316L SS dimple jki.(3) 21897-Metal Arts Corp. vessel, 17,000 gal. vert. 317L

iton Coip. Tenk, 12,000 gel. vert., solid 316L SS. (2)

21875-Bins, 176 cu. ft., S/S, cone bottom flat top. (4) 21891-Bins, 450 cu. ft., C/S, epoxy lined. (8) 21904-Bins, 450 cu. ft., C/S, epoxy lined. (5) 21905-Bins, 500 cu. ft., C/S, epoxy lined, flat top, conf-

cal bottom. (4) 21918-Worthington cent. pump. C/S, 15 HP, 200 GPM et 44 paig (2) 21916-Union Pump-Inline, C/S, mod. 4x6x8.6 VCK, 49

21906-Edw Renneburg Rot. Dryer, S/S, steam heat. 10

HP. (4) 21881-Heaters, C/S steam, type BNF 2420 (8) 21914-Flourenics bin vent, (liters, 122 sq. (t., 12 bags, 21889-Katron Feeder (win screw, S/Smod.5400-150 (4 21901-Spankler tilter, 352 sq. H. C/S, mod. VR-32-32. 21882-Screw conveyor, 304 SS, 7" d/a. x 1 fL, 1.5 HP. 21888-Strong Scott Rib Blender, 25 cu. it., 5 HP. (3) 21920-Welex extruder 6", 30:1 L/D, 400 HP. 21870-Welex extruder 8", 30:1 L/D, 600 HP. 21876-Conair pelietizer, 8/S, mod. 1024, 40 HP. (2) 21874-Water bath, S/S, portable. (4) 21887-Ross Static Mixer, 304SS, 3"x8 element. (4) 21917-Ingersol Rand pump, in-line pump, C/8, 30 HP. 21915-Goulds, C/8 turbine pump, 280 HP. (2) 21913-Worthington cent. pump, 8&S, 2 HP. (4) 21912-Union pump-inine, S/S, 7.5 HP (2) 21910-Tenk, 840 gel., flet top & bottom.

21920-Modern Welding Tank, 4800 gal. horiz. rubber 21878-Gorman Rupp pump, centrifugal C/S, mod 82EZ. (2)

21871-Prodex extruder 8", 30:1 L/D ratio, 600 HP. 21892-Buffalo blower, size 30, C/S, 10 HP (3) 21908-Buffalo s xhaust fan, sizo 36, type B, 15 HP. 21880-Sutor Bill Blower, C/S, 40 HP. (4) 21922-Buifalo blowor, type 40-3CB, 40 HP. (4) 21894-Buffalo blower, mod. 45-3CB, 75 HP. (3) 21883-Bird, 32x 50 centriluge, 80:1 gearbox. (2)



21883-8ird Centrifuge, 32x50, 80:1 gearbox.

21893-Environe ering scrubber, mod. A33-14000 21895-Tank, 850 gal. vert. coal tar epoxy lined. 21911-Tank, 54000 gal. vert. C/S epoxy coated that

21903-Tank, 50,000 gal. veri. C/S spoxy, flat bot. conl-2 1902-Worthington compressor, mad. 4BB-2, vert. 125

21879-Sweco sifter 60", mod. LS60S88, 2.5 HP 21923-Xason sifter 60", mod. K60185, 8/S, 1HP. 21884-Flotronics Cyclone med. FTHEC370-T, 304 S/8 12" dis. dish top. (3)

ATTENTION:

EAST COAST BUYERS! 61,000 gal. Tanks, T304SS, 18'dia.x32'H, liat top & bot., Chemineer Agit., mod 7HTD-20, 20 HP, 27 RPM. (4)

FILTER PRESSES

19846-Shriver P&F filter press, 12"x12 closed delivery, 23 chambers. 20534-Sperry Fitter Press, 30", alumn 20539-Sperry fitter press 30", 35 Aluminum plates, 357 sq. 15370-Shriver 32" x 32", polypropylene, 27 plates, ratche

closing. 15929-Shriver ALP, plate & frame, 18 36" x 36", S/S recessed plates. 19799-Clow/Bethlehem filter press, 36", recess plates, 25 chambers

20076-Sperry filter press. 36", cast iron plates, closed deliv 19462-Independent litter press, 42" x 42", polypropylene, 4 eye closed, 34 chembers. 20550-Sperry fitter press, 42" Enclicioser, 41 alum. plates

CANADIAN BUYERS

LIQUIDATION-QUEBEC

22373-Reactor, 3500 gal. 8'x9'H, S/S clad, agit, dimple 22381-Reactor, 5000 get. 10'x92"H, T316S clad, internal

330 h. jkt 75 lb., agit 30 HP, vari speed. (2) 22379-Philadelphia. 7V63 agit drives, 10 HP, S/S (4) 22386-Slebtechnik H-400 centrifuga conturbex horz. screen, S/S, 20 HP. 22365-Cimatrol water chiller LFV151172, 40 tons. 22385-Cyclone Sepeertor, 40" dia. x2" plus 6" cone, S/S,

Joy fan 15 HP. 22375-Sweco 30", 3 deck, S/S, ½ HP (2) 22387-Waukesha mod 300, Sanl pump, 6"x6", 15 HP.

FILTER-ROTARY VAC. 15828-FE.mc. 36" dia.x12". S/S, atring disc., 1/2 HP. 17477-FE.mc., 3" dia.x 5", 731685, belt disc., vac pump. 11177-Dorr Oliver S/S, 5' dla. x 6'L. 11653-Oliver T-316SS, precoat 5'3" x8 19431-K S flexibelt, 6 dla. x 6 face, 316SS. 18392-Eimco belt filter, 8'x 10", steel drum, w/Nash gumt 15827-Ametek, 8' dia x14'0" face, maxi-belt, S/S. 17936-Eimoo, 316SS, 10' dia. x 14', kriife discharge. 17283-Impeobelt filter, 12 dia. x 12, 304SS, Nash yacuun 20251-K.S 7304, vacuum filter, 12' dia x 14', 304SS. 20323-Dorr Oliver 11'6"x16' face, S/S cont. parts. 1486-Eimco 10'x10'rotary vac. filter.

UNUSED Manesty Express, 10 ton, 20 stations. 11602-Colton Press mod 260, 31 die stations, 1800 TAB 2 i 382-FJ Stokes rotary tablet, 15 station, 10 ton. 21418-Manosty rotary tablet, 16 station, 10 ton. 14425-Stokes Tab Press mod #551, 51 station, 4 ton. 21417-FJ Stokes rotary, 27 station, 4 ton, double sided 603881-Komerak Greaves, mdl. 75MS8 briquetting press 13392-Fitzoatrick Chilsonator, 50 HP, mdi. HA-50-30-210. 8802-Stokes single puonh press, 900-530-1 (T4), 12 ton. 7224-Dorst compac., series TPA15, 20 tons.



10890-Stokes, mcli. Fl-4 press, 20 tan.

22215-Wilmes Bladder Press, S/S, 38" diz. x 9'9" long, horiz, 5 HP, unitized. (2)

DUST COLLECTORS 21125-Fabri-IJat joll SO9-4B bin vent, 42 sq. ft. 16398-Mikro dust collector, S/S, 63 sq. ft., mdl. 9-6-100,

21153-EVO, but vant, 725g. ft., S/S, 5 HP 20253 Unused EVO pulse jet collector, mdi. 84BF009C, 90

21 192-JH Day mdl. RJ-18RJ36, 125 sq. ft., CS, 3 HP. 21222-Fabri-Jet. and SQ16-80, 151 sq ft 20398 Pulse jet collector, "FlaxKleen," mdi 58CT24 AV II w/175 sq ft . cloth, C.S.

21286 Mikro dust collector, 285 sq. ft., S/S. 20256-Unused EVO Corp. pulse jet dust collector, mdf. 99BF030C. 350 sq. ft. 20255-Unused EVO Corp. dust collector, shaker type, and, MS049C10, 575 sq. ft.

SCREENS

21203-Sprout Waldron sitler, D10, 6 decks. 21150-Sprout Waldron, D10, 1 HP, 10 decks, S/S cont. 21167-Sprout Weldron, D10, 2HP, 10 decks, S/S cont.

UNUSED CENTRIFUGES

21593-Sharples P5400 Sanitary Centrifuges w/200 HP motor, 25 HP backdrive, gearbox, 5" pitch conveyor, CIP, control panel (2) LATE MODEL

CENTRIFUGES

20827-Bird, 18"x24" steel, contical bowl. 20826-Bird, 24"x38" steel, con. bowl, gearbox. 20819 Bird, 24"x38", S/S, 15 degree, contour bowl. 20884-Bird 24"x60", H series, steel w/motor. 20384-Bird 32"x 50", SS T316 contour, 75HF 12883-Bird 36"x96" contour, 10 deg., T317 ELC. 20137-Alfa Laval, NX 418-B31-80, 316SS, gearbox 17308-Dorr Oliver, 3048S, Merco mdl. 16L, 30 HP. 13565-Sharples, mdl. P 600, gearbox, motor 19767-Unused Sharples, 3 phase, P3000, S/S, carbide 20407-Sharples P2000 316SS, 20 HP drive motor. 2040/Sharples P2000 w/gaerbox. 20886-Sharples P3000 w/gaerbox. 20886-Sharples P3000. 52:1 gearbox, S/S casting. 21725-Sharples, P3400. S/S, gearbox & motor. 19249-Sharples, P5400. 316/3178S, 200 HP, gearbox.

CENT-BASKET VERT.

15815-Delayal Mark III, part. basket, 40"x24", 316SS. 30 19446-Sharples Sludge-Pak, SP-5500, 40"x24" basket

ROTARY VAC DRYER



22210-Bertrama, S/S 6'dia. x 12' dished heads, half pipe coll jacket 200 psl, 20/13 HP, unitized.

FILTER PRESSES

9848-Shriver P&F filter press, 12"x12" closed delivery, 23 chambers. 20534-Sperry Filter Press, 30", alumn

20539-Sperry filter press 30", 35 Aluminum plates, 357 sq. 15370-Shriver 32" x 32", polypropylene, 27 plates, ratchet 15929-Shriver ALP, plate & frame, 18 36" x 36", S/S re-

20076-Sparry filter press, 36", cast iron plates, closed deli-19462-independent filter press. 42" x 42", polypropylene. 4 eye closed, 34 chambers.

20550-Sperry filter press, 42" Ehd closer, 41 alum. plates.

POWDER METAL HYD. PRESSES

1984. 22507-Bliss 230 ton dual pressure w/pumps& contra. 22508-Lawton 90 ion, dual pressure self cont. w/conti 22509-Lawton 225 ton upacting, hyd. pump & motor. AVAILABLE FROM EAST COAST 'High savings before removal CALL: Mike Cohen

TANKS-S/S

22257-UNUSED Tank, 100 gal., T304SS, 30" dia., DH 22253-UNUSED Tank, 550 gal., T304SS, 4" OD, DH, 22256-UNUSED Tank, 1200 gal., T304SS, 5" dia. x7"H, DH. 21283-Tank, S/S vart., 1200 gal., 6' dia.x6', flat top & bot. 22255-UNUSED Tank, 1800 gal., T30498, 6'6" dia. x 7'3" 22254-UNUSED Tank, 3,000 gal., T30499, vac., 5'dia x 20651-Tank, SS, 9000 gat., agit., 12' dia. x 14'6" H.

17043-Jos Oat horz. tank, 304SS, 16,000 gel., 12'6" dia. x 22'9½" long, 10 PSI.

REACTORS

20252-Unused Reactor, 600 gal., 304SS dimple iktd. 10138-Plaudier, 800 gal., T-316 L.SS, 55 PSI int/150 PSI. 20928-Brighton, 4000 gal., 6' dia. x 10', 316 ELC S/S 20456-Reactor, 4,000 gal., 316 S/S, 8' dia. x 7'9" st. side. 15475-Brighton, 4000 gal., 3165S; vacuum. -20287-GH Hicks, 4000 gal., 316 SS, pipe coli jiki. 20923-Richmord Eng. Reactor, 4600 gat., T316 stein/clad. Pfaudier 10,000 gat. roactors T316L, 100 psi int, 180 psi. Pfaudier 15,000 gat. reactor T318L, 100 psi int., 200 psi ikt:

JUST PURCHASED

22435-Mieli Mixer, 250 G. algma, S/S., kt., vac, 100HP 22448-B.P. 100 gal. Sigma, S&S., llt., vac, 100HP 22446-Pfaudler 30 gal. G/L reactor (2) 22446-Pfaudler 30 gal. G/L reactor (2) 22439-B.P. 100 gal. Sigma, s/S 22440-B.P. 200 gal. Sigma, tilt. 22441-Pappenmeler 600 gal. Liter Mixer/Coller 22460-P.K. twin shell blender, 1 cu. ft. 325 lbs/cu. ft L/S stainless. w/drives 5 HP bar, ¾ HP main, 22461-P.K. 1 cu. ft., S&S, 275 lb. density, 30 lb. kt., vac., ¾ HP vari speed main, 2 HP bar.

vac., 34 HP vari speed main, 2 HP bar. 22314-Sharples #16 Super Centrifuge S/S, 3 HP. cooling coils clarifier (22) 22351 – Atlas Copco air compressor, 600 CFM @ 125

22331 - Atlas copco air compressor, dud chilig iza psi, 125 HP. (5) 22198-Gouda Fiaker, 4'x4' stainless steel. 22199-Gouda Fiaker, 4'x4' stainless steel. 22344-Christian ribbon mixer, 36 cu. ft. steel jacke 7.5 HP, unitized. 22342—Sheet extrusion line, Prodex 4.5", 24:1 L/D, 50

HP, stheet die, chilf roll stack, Fernoo sheet. 22343-NRM Terret Winder, 48-46 w/2 edjusto speed motors, 1 HP 22348-Sheet Coater, 54" steam heated.



22344- Christian Ribbon Blender, 30 cu. ft., C/S

22449 - Gemco 10 cu. ft. S/S, |kt. L/S processor 22491 Conair Water Chillers, 7.5 ton. (3) 22486 Conair mod. Plow-15 ton. 22498 Acrison mod. 203-1052, 1½°, 2½°, 4° auge

22497-Sparkler mod. 18511, T304 S/S 22497-Sparkler mod. 18511, T304 S/S 22499-Walter 750 gal. reactor, FV/100 lb., jkl. 40 lb. 30 HP vari dual motion. 22487-Walter 225 gal. reactor, FV/100 lb., jkl. 40 lb. 10 HP vari dual motion. 22453-Stokes mod. 280 F. 100 ton press.

MIXER/EXTRUDER

21350-B.P. 500 gal. Sigma steel, jk 125 psi, 150 HP, Hyd. tilt 22352-Twin screw extruder (NA Bitruder Co), 65 nm, electronic control of the cont

heated, 20 HP DC, pellett die, vac pump used 100 hou 17654-AMK 25 get Mixttruder, Sigma, ST 7.5 HP. 18298-J.H. Day 25 gal. Dispersion, 25 HP variman. 10 H 20996-AMK 30 gal. S/S, jkt. Sigma, 7.5 HP Main, 6 H

Screw.

21334-Rosa 40 gal., 8/S hot oli kit., Sigma 6" disch, screw.

19826-AMK 50 gal. ST., kit., Sigma, 10" disch, screw.

19821-AMK 75 gal. ST, jkt., Sigma, 10" disch, screw.

17136-AMK 120 gal., ST Sigma, 11.5" screw.

14832-AMK 150 gal., S/S, Sigma 15HP main, 10HP screw.

19494-AMK 150 gal., S/S, Sigma, 50 HP main, 10HP screw.

20116-AMK 150 gal., ST, Sigma, 15 HP/10 HP

503527-New Aaron 300 gal., T304SS, mix extruder, Sgra., jkt., up to 200 HP main, 75 HP hyd., screw.

STILL INSTALLED ... CALL NOW! STILL INSTALLED ... CALL NOW

504528 - Aaron 300 gal. mixer/extruder T3049S,Sigma 150 HP, screw 75 HP hyd. jkt. 200 psi

Call Steve (312) 350 - 2200 **MIXERS - PLOW** 503755-Littleford, FKM 600D, SS jacketed, 25 HP. 20754-Littleford, FKM 3000D 65 CF, S/S, haljacket.

19214-New Plow Mixer, 80 cu. ft. 3478S, jacket, 100HP. 20829-Littleford FKM 4200D, S/S, 87 cu. ft. JKT. MIXER RIBBON

21120-Ribbon Blender, S/S, 10 cu. ft., Rt. SS, 150 pt. 20276-Read ribbon blender, 14.7 cu. ft. 3045S, 3 HP. 20616-Unused Day, 316SS, 23 cu. ft., 5HP. 20189-Robinson, 25 cu. ft., 6/S, jackel, 10 HF. 20985-Int 134 cu. ft. S/S dbl. ribbon, 5 HP. (4) 20212-Heas ribbon, 36 cu. ft., S/S, 15 HP.

motor. 21124-Ribbon Blender, 30463 jkt., 160 cu. ft., 50 H 20614-Unused JH Day ribbon, 5/5 270 cu. ft., 56 H 21114-JH Day ribbon blender, S/S clad; 76 HP, 480 cu. k

NEW ACQUISITIONS

Mogal FRP vert. tenks, 7'8"x 14'6" (2) 300 gal. Pfaudier G/L 25/90 pai, 3TW 7/80 gal., 3163S reclevers, 50 psi & FV (2) Unused 70 cu. it. Titanium dbie cone vac Dryer 100 gai. DeDiotrich G/L reactor, 30/76 pai mech. gal 83 jktd. Sigma, 15 HP mori. Residco jkid. Sigma mixer, 400 HP seal, 2HP New 1979 tal ILPK 39 Twin Shell w/bar SS Ht. Exch.; 246,200, 125, 58, sq. ft. sau it SS Day double ribbon, 71/2 HP 10 gal., 7 gal., B-P Dispersion jktd., vac., 20 HP 8" 316 85 Bird Solld Bowl Centrif. 21/2 gal. Day SS Sigma jktd., vac., 10 HP IN DE 1827/16/10 Pulverizer 30 HP SS Littleford mixers w/choppers FKM 2000 D. 13-100 Aeromatic SS Fluid Bed Dryer

REACTORS **FILTERS**

200, 1000, 750, 300, 100 gal. G/L, mech. 42" Shriver poly, 50 ch., 4 eye 48" poly chambers, 11/2" cake, 4 eye (150) 100 gal. 316 SS 100/150 psi vari. agit. 300 gal,304 SS, 25/125 psi, 1/2pipe coil MW gal, 304 do, 23/120 psi, 72pipe coll Md., agit New 1974 20 gal. 316 SS, 75/180 psi, agit. 100 gal, 316 SS, 75 & FV/150 psi, agit. Mgal., 316 SS, 75 & FV/70 psi, agit. Mmore in stock from 10 to 300 gals., 304

4 316 SS. Call Now.

SS BLENDERS (8 pt. ft. 33 Patt. cone, w/liquid bar 18bbn/Paddle: 650, 200, 120, 70, 40, 23 cu.

Conicel: 320, 200, 150, 130, 100, 88, 69, 40. 30, 20, 10, 5, 2 cu. ft. (18) Twin Shell: 200, 100, 75, 20, 3 cu. (t. some with intensifiers (12)

MIXERS

Souble Arm: 1000, 500, 300, 200, 150, 10, 7, 2½, gal. Sigma, jktd. Pagy: 125, 75, 100, 80, 60, 50 gal. (12) Penetary: 100, 85, cal. vacuum (Spersera: 75, 40, 25, 20 15 HP (8) infelord: FKM 2000D, FKM 600D, FKM 130D,

kd & choppers (3) **MISCELLANEOUS**

fsc. Pumps: NASH: CL 2003, CL 703, AT 2004, L5, MD 674 KINNEY: KDH 150, KD 30,KS 27, Stokes: 212 H 10. iblet Presses: STOKES, MANESTY, COLTON. All Sizes

SS filter presses: 18",16",13",12"(7) Sparklers: 3359, 18D10,6-6

CENTRIFUGES 48"x30", 40"x24", 316 SS auto-batch 40", 30", 26", basket, SS & R/L avail. P5000, P3400, P3000, P2000, Sharples 40"x60", 24"x60", 18"x28", 6" Bird DeLaval: NX 207, BRPX 207

1200 D, 600 D, (4)

Westphalia: SAMN 5036, SA 1435-076 HS36, HS24, S8, 316 SS B-P "Ter Meer"

MILLS/PULVERIZERS Chilsonators: all SS, 7LX 10D, 6LX16D Fitzmills: F20, F8, D6 (8) Mikro: 4TH, 3TH, 2DH, 2SCB, 1SH, 8MA 3-Roll Mills: 16"x40" to 4"x8" (9) Ball & Pebble: 8'x12' to 2'x2' (12) Colloid: 50, 25, 15, 10, 5, 1HP

Raymond: 5057, 5047, 4237, 3036 DRYERS/EVAPORATORS

Wiped film: 173, 87, 25, 21.6, 12 sq. ft. Belt Flakers: 48"x45', 20"x20" Con. Vac.: 500, 100, 50, 40, 10, 2,5 c.f. Rotary Vac.: 130, 40, 20, 10 cu. ft. S.S. Fluid Bed: 100 kg, 60 kg, 30 kg, S.S. Double Drum: 12"x18", 6"x8", S.S. Flakers: 6'x5', 3'x6'6", drum

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TERSON-KELLEY "V", 1 cu. ft., S/S, 550 lbs. IFALO6"፣7½" dbte. drum dryer, chrome plated. 190996"x12" two roll mild, 71/2 HP. というない ibree roli milit, シャ HP XP. EMEYER 10 HP disperser, X P, VS. DARDMETALS model JI 600 bottle cleanor. modelKX60 tube filler, S/S, agit, hopper. . MYSURELL S/S oscillating granulator.

MOULOX 100KW water-glycol heat transfer sys. STUART EQUIPMENT CO. PO.Box 469 North Chloago, IL 60064 312-473-4500

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Amines # 3A, 3D, & #11 0 rer lype MX objers-NEH 120 & 200 MIXERS ndera 114,6, 17.5, 80 & 215 ou. ft. Hearth see, 17.5, 80 & 215 ou. ft.

The liters 89 BO, 60, 126, 176 gal.

Specifical 89 24 # 1P UNUSED & #2

BAKER PERKINS JKT. MIXERS

BALLE PERKINS JKT. MIXERS A Spras Sottom 400 HP

sp. Bispersion 15 JEM 2, ohrome plate 80 HP

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sp. Spras JAM TH: 20 HP

sp. Bispersion 15 JEM 2

sp. Bispersion 45 JEM 2

sp. Bispersion 45 JEM 2

sp. Bispersion 5 JEM 2

sp. Spras by HP vari

GREAT BUYS FROM LOCATION

1) BS Nibbon Blanders 215, cu. ft.,54"×12' SME full lacket 30 to 75 pel 40 ft.P.) As a bove but 30 cu. ft., 26"x59", 10 HP onnot 4" Extruder 7"/2 ft? varidite MC 36" x 56" 63 vibrating acreen outsyttle 5"x26" 93 Rotary Dryer SWENSON TRIPLE EFFECT EVAPORATORS ,000 & 7,000 lbs./HR., INCONEL & HASTELLOY

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2,000 gai. 85 reactors 150 psl. jkt. agi. (2) 1,000 gai. 95 reactors 150 psl. jkt. agit. (2) 9; gauder 100 & 600 gai (2), reactors 2,160 gai. 8,8. 100 psi 6'x5' (4) 2,600 gai. reactor 318 98, 75 psi + Vac./160 psi jkt.

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Bird 36"x50" Husteley C centifuse Blaw Knox 1800 & 160 sq.ft, 88 Evaporate LUWA Thin Film 200, 173, 120 & 20 sq.ft. VAC. oven 42" dis. x 80"L 30 KW STOKES presez Dryers 24 & 300 sq.ft. BIRD 24",38" S.B. Cont. Cent. Bowen 10"x30"A 20"x50" 88 spray dryer Holofitte 98 dryer-Chiller Model D1612-6 Abbe 88 2 cu. ft. conicel vsc. dryer

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Teltz Prebresker 300 HP SCR Drive R compressor 1000 cfm, 100 psi 200 HP 107-VAC, Fiter 10'x18', 8'x5', 4'x5', 8'x3' 'CRK Turbomaster 700 Ton Refrig TOKES Model 840,284, T-4 T Presses susin 88 Homogenizers MC 18, MF 18 + MC 45



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(12) 40" x 60" Bird decanter, 316 S/St, 15/3 deg. contour, 5" pitch, single lead conveyors w/Stellite hard surfacing, 80:1 gearbox, 100 HP V-belt main motor drive. New late 60's. Excellent condition. Limited Use, immediately Available from

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Stainless Steel, mdi L-12, steam heated. 48" dia S/ST trays & sides w/heater controls.

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(2) Blaw Knox designed double drum dryers, 18" x 48" & 36" x 120", chrome plated, each w/vacuum chambers & vacuum pump package. Excellent condition. Ready to Ship.

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Model N-22, 8' dia trava 22 high, with stainless steel contact parts. May be shipped in one plece. Steam heated.

ROTARY FILTERS Ametek 8' x 12' rotary w/belt

discharge, 316 stainless, new 1974 - Excellent condition. -Ametek 5" x 81/2" rotary w/belt discharge, 316 stainless. New 1974 - Excellent condition.

STAINLESS DRYER

Louisville stainless steel steam tube dryer, 8' dia x 40', stainless steel clad shelfw/stainless steel ateam tubes.

Also Available:

Roto-Louvre mdl 900-32, 9' dia x 32' long, steam heated, 30 HP motor, all fans & Flex-Clean dust

CRYSTALLIZER

Titanium contact parts, 8000 lbs p/hr capacity. New 1976. Complete and still installed.

RAYMOND ROLLER MILLS * * * Just Purchased * * *

3) Raymond high side roller milis model 5057, double whizzer separator, fan; feeder, cyclone, duct work & bucket elevator.

LARGE SHARPLES SUPER DECANTERS

(2) Model P8100 Sharples Super Decanter, 316 S/ST, carbide tiles, 250 HP main drive, 126:1 gearbox w/backdrive. New 1979. Complete. Excellent Con-

FLUID BED DRYER

leffrey fluid bed dryer, 5' x 20', 304 sanitary construction, complete installation including fans, dust collector, S/ST scrubber &

controls.
EXCELLENT CONDITION

INDUSTRIAL FILTERS

(2) industrial Filter Sysytems, 600 & 200 sq. ft. each, dry cake discharge, vulcanized rubber lined tank w/316 S/ST filter leaves, completely automated w/computer controlled actuators. Like New Condition

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(1) 8500 gallon 316 S/Tt reactor, 30 PSI/full vacuum internal, 15 PSI jacket, 45 PSI 316 S/ST colls, 10/15 HP 2 speed turbine agitator, S/ST overhead condenser. New 1977. Still Installed. Excellent condition.

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SOLIDAIRE DRYERS Model SJS-24-16, 24" dia x 16 long, 304 stalniess, dimple jacket, 50 HP vari drive. Model SJS-20X16, 20" dia x16

long, 316 stainless steel, jacketed. Model SJS8X52, 8" dia x 52" long stainless, jacketed, pilot size. Stainless steel mdi SJS-36-22 w/acket & 40 HP drive

JUST PURCHASED

Link Belt Roto-Louvre Dryer10'3' x 36' long, mdl #1003-36, complete system incl 50 HP drive, firebox w/20,000,000 BTU gas burner, all fans, duct work & controls, multi-cyclone collector & Sly 30,000 CFM baghouse. Excellent Condition Still Installed. We will load - Call for FOB Pricing

AMETEK ROTARY PRECOAT FILTERS (1) 2' x 3', T304 sanitary stainless, complete station w/vacuum

receiver, pump, mix tank & Nash vacuum pump. Rebuilt. (3) 10' x 16', 316 stainless steel, 100 HP Roots vacuum pumps,

receivers, interconnecting piping, (1) 3' x 3', string discharge, 316 stainless, incl S/ST agitated through, vari speed mtr, vari speed dry on drum, 316 stainless Sihi vacuum pump. Excellent condition.

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Drum Dryers/Flakers (1) 24" dla, x 36" Bullovac SS dble. drum

dryer (2) 32" dis.x 108" Blaw Knox Cl dbls. drum

dryer (1) 32°dis.x 17°6" Sandvik SS belt lisker (1) 36°dis.x 10' Buflovsk Ci dbie, drum dryer (3) 42°dis.x120"Blaw Knox Cl dbie, drum

dryer (1) 48"dia.x 28" drum flaker, chrome plated

(1) 48"dia.x 40" Cl flaker, mfg. by Buffalo Foundary (1) 48"dla.x 40 drum tieker, nickel plated drum, mig. Blaw-Knox

Fluid Bed (1) 60 Kg. Aeromatic, Balch, 8'x9', 56,000 (1) 100 Kg. Aeromatic Model ST 100, sanitary SS (1) Fitzpatrick Model FA 250, SS, 20 HP XP

Holoflite (1) Western Precipitation Model P80SSO-A, twin screw, 12" dis. x 20" long, S5 conetr., jcki, rated 15 pel, complete with 7.5 HP

(1) Now/Never-Used Joy Processor, CS, single screw, 16"x16" long, rated 110 psl @ 340° F., sprockot & chain drive by 1.5 HP varispoad drive.

Rotary Vacuum

(1) 200 Cu. Ft. Stokes, BS constr., compit. (2) 165 Cu. Ft. Pfaudier, Double Cone, G/L, 30 AFV/50 pst | ktd., 15 HP vari-drive (1) 150 Cu. Ft. Blaw Knox, Nickel (2) 132 Cu. Ft. Stokes, Nickel (1) 72 Cu. Ft. Blaw Knox, SS (1) 50 Cu. Ft. Titanium Double Cone (1) 50 Cu. Ft. Gemco, 3169S sanitary, double

cone (1) 37.8 Sq. Ft. Horiz. Thin Film, vac. int. & 150 psig. 304/31688 (1) 37 Cu. Ft. Gemco, SS (1) 30 Cu. Ft. P.K. Twin Shell, 30498 (1) 20 Cu. Ft. Abbe Twin Cane, 30488

Spray

(1) 30"x3" Bowen Laboratory w/3" cone bottom, S\$ constr., w/centrifugal atomizer, 3 HP blower & motor.(1)
(1) Niro lab size 32"disx2"w/2"cone w/centrif. atomizer 85 contacts
(1) 16" dis. Bowen compit. system S8 contacts, new 1976

CENTRIFUGES

(1) Delaval BRPX 309, SS. 20HP (1) Unused Model B-10 Podbielniak, Alloy 20 1) Sharples AS-26, SS

(1) Sharplea AS-26, SS (2) Sharplea AS-16P, 316SS (1) Alfa-Laval SS Decanter, Horiz., Mdl. NX314 (2) Dorr Oliver Mdl. CH30 CSU "Merco," 316SS contacts, 150 HP (1) Baker Perkins S-32 "Pusher Type," SS, 50 HP (1) Bid 48" x 28", 316 ELC, contour bowl. (2) Bid 24"x38", 316SS, 40 HP

3) Sharples P-3000, 31658, 30 HP 1) Sharples P-1000, 88 20HP (1) Unused Sird 36 x96, 317L SS 40"x 20" Tolhuret centrifuge, Kyner lined, perf.

(1) Tolhurst 48" x 24" parf. basket, 31658 sanilary, auto, plow & discharge, rated 85 =/cu. ft. @ 900 RPM, 20 HP XP,

1) Tolhurst 48" z 24" Batchmaster, 31653, perf. basket, w/hydr. plow & 20 HP hydr. drive) Tolhurat 48"x24" Batchmanter, rubber lined

perf. basket, w/hydr. plow & 20KP hydr. drive 2) Tolhurst 48" z 24" Batchmaster, Heresite

1) Western states 48"x 24", 316 SS

 Fletcher 48"x 28" Suspended type, SS perf. basket, 20/10 HP Sharples Tornado 48" x 30", 316SS, perf. basket, 40 HP XP

(1) Alfa Laval Model MAPX 210 T24, SS welted parts
2) Sharples C-27, 316 SS, wetted parts, 40 HP

(2) Sharples C-20, Super-D-Hydrator, SS, 30 HP (1) Sharples C-20, Super-D-Hydrator, SS, 30 HP (1) Dorr Oliver Marcona Screener Model C-400 X2, all SS, twin screw disch., 10 HP

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RE-ERECTION

DEMOLITION

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COFFEE PLANT LIQUIDATION

(1) Hdl. #DASO-6 Fitzmili w/15 HP meter, on stand.
(1) Hdl. #D-6 Fitzmili w/16 HP main motor & 2 HP on stand.
(1) Hdl. #20H Micro-Pulverizer.
(1) Hdl. #25H Micro-Pulverizer, S8, w/40 HP main motor & % HP screw

motors. (1) Nico-Pusair SS Reverse Jet Dust Collector, Model 964-3-8-20. (1) 8" x 42" Votator Scrapped Surface Heat Exchanger, w/6 HP motor &

(1) 8" x 42" Volator Scrapped Surface Heat Exchanger, w/o nir motor a just.

(1) 48" Swaco Single Dack Screen w/cover, SS constr., 1 HP
(1) 32" w. x 8" ip. Witte Vibrating Conveyor, SS, w'cover, 2-dack.
(1) 2*6" Witte SS Fluid Bed Dryer w/pert, plate.
(1) 32" W. x 13" Sendvick Belt Flaker, SS, 9" cooling section.
(1) Stokes Freeze Dryer System, compit. w/prebreaker, micro-wac. 8 York chiller.
(2) Jones Dawstering Presses.
(1) 1500 Gel. SS Jickid. Mix Tanks, 3 HP, diethed top, flat bottom.
(2) 2000 Gel. SS Mix Tanks, senitary fittings. 4" HP Lightnin.
(1) 2000 Gel. SS Mix Tanks, senitary fittings, 3 HP Lightnin.
(2) 2000 Gel. SS Mix Tanks, senitary fittings, 3 HP Lightnin.
(2) 1800 Gel. SS Mix Tanks, senitary fittings, 3 HP Lightnin.
(3) 1500 Gel. SS Mix Tanks, senitary fittings, 3 HP Lightnin.
(1) 1000 Gel. SS Mix Tanks, senitary fittings, 3 HP Lightnin.
(1) 1000 Gel. SS Mix Tanks, 18 P Lightnin.
(1) 1000 Gel. SS Mix Tanks, 18 P Lightnin.
(2) 1801 Gel. SS Mix Tanks, 18 P Lightnin.
(3) 1500 Gel. SS Mix Tanks, 18 P Lightnin.
(4) 1000 Gel. SS Mix Tanks, 18 P Lightnin.
(5) 1000 Gel. SS Mix Tanks, 18 P Lightnin.
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(1) Podbielniak mdl. #9700-2
Cent., 280 P8i
(1) 5,000 gai. CS, Vertical Sphere, Rated 1007 P8i(3)
(2) 12'k' dia.x307'k' Long Packed Col. 30488, 275 dealign pres.
(1) 64 sq.ft. U-Tube Heat Exchanger, all 31683 75/450 pai
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(1) 90 sq.ft. Heat Exchanger, CS/88 75/55 pai
(1) 680 sq.ft. Heat Exchanger, CS/88 75/55 pai
(1) 1005 sq.ft. Heat Exchanger, CS/88 75/50 P8i
(1) 1401 sq.ft. Rabolled CS/88 75/150 P8i
(2) 550 gai. Levus Lined Plastic Tanka 4'dia.x5'k' st.sd.
(2) Fairbanks Morae Gas Compressor 3380 CFM 600 hp.

(2) I-R Type ESV Compressors 30 (1) GATX Fuller Air Compressor 50 (1) Corken Compressor 7.5 HP

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1-562 Sq. Ft., 316ELC, Hercules, 28 leaves

1-512 Sq. Ft., 316SS, Niagara, 21 leaves 1-400 Sq. Ft. R/L Sparkler 1-327 Sq. Ft., 304SS, Ind. Filter, 11 leaves 1-320 Sq. Ft. Durco 316 SS, 11 Leaves

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1-200 Sq. Ft., SS, Hercules, Horlz. 1-191 Sq. Ft. Enzinger, SS, Vert., 75 psi 1 - 157.64 sq. Ft. Sparkler model 55-5-28,

-150 Sq. Ft. Horiz., 12 Vert. Leaf 316SS

1-135 Sq. Ft. NI, Bowser, Vert. 1-35 Sq. Ft. Hercules Model 5, 316 SS, harlz, tank vert leaves 50 psi

1-56.5 Sq. Ft. K-S, 316SS, flexibelt disch. 1-87.92 Sq. Ft. Felnc, SS wetted parts,

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disch. 1-200 Sq. Ft. Elmco, 316SS, 8'x8' 4-250 Sq. Ft. D.O. 316L SS Precost, 8"

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precoat type w/knife disch., 10" dia. x 10' drum, compit. w/control panel &

1-314 Sq. Ft. Elmco, precost disch., 31688 1-400 Sq. Ft. Elmco, CS, Precost 1-500 Sq. Ft. Elmco, 31688, belt disch.

1-3'x1' Dorr Oliver, FRP w/receiver & Nash

H4 vac. pump, 10 HP 1-3'x 1' K-S comp. sys., 316 SS Flex-belt

1-250 Sq. Ft. K-S 316SS, coll disch.

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1-56.5 Sq. Ft. KS, Income! 600

Rotary Vacuum

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1-3'x1' 31688, knife disch.

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(1) 1.4 Sq. Ft. Luws Wiped Film, 316SS, 1.5 HP
(1) 1.4 sq. Ft. Luws Wiped Film, 316SS, 1.5 HP
(1) 2.5 Sq. Ft. Rodney Hunt Turbo Film 347 SS
(1) 5.4 sq. Ft. Luws Elmituder, 318 LSS
(1) 5.4 Sq. Ft. Voision Evaporator System, 318 SS contracts, 15 gal 8 FV & Int., 150 psi jtt.
(1) 8.7 Sq. Ft. Rodney Hunt Turbo-Film, 304 SS conisct parts, 15 psi 8 FV / 150 psi jtt.
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(1) 20 Sq. Ft. Kontro Hortz, Adjust-O-Film, 316ELC, 50 paig, 15 (1) Approx 31 Sq. ft. Verl., Turbo-Film Processor, 304 SS

Contacts
(1) Like New 37.8 Sq. Ft. Luwe Horiz. Thin-Film Dryer, 304/316L

SS (1) 40 Sq. Fl. Kontro Adjust-O-Film, SS constr., 20 HP (1) 47 Sq. Fl. Artisan rising Film, Hast. "C" (1) Approx 51 sq. fl. Plaudier Wiped Him, 316 SS, 100/85 & FV (1) 80 Sq. Fl. Kontro Wiped Film Syst., SS constr., FV/150 psi,

(1) UNUSED 66 sq. ft. Luwa likin film dryer horiz. 316 L wetled parts, FV int., 150 pai set eleam jkt. (1) 141 Sq. Ft. Rodney Hunt Turbo-Fitm, 316 68 15 pai int., 35 pai jkt 40 kP XP

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800 Cu. Ft. |ktd. Dbl.Rhm, CS
Approx. 480 Cu. Ft. CS. 75HP
UNUSED 460 Cu. Ft. Marion Paddia, CS. 75 HP
400 Cu. Ft. Jt. Marion Paddia, CS. 75 HP
400 Cu. Ft. Jt. Marion Paddia, CS. 75 HP
200 Cu. Ft. CS Dbl. Cone 30 HP
200 Cu. Ft. KS 31685 Bbl. Cone
175 Cu. Ft. KT win Shelt, 31635
55 Cu. Ft. Jt. Jt. By 90h. Ribbon Carbon Steel Conir. 25 HP (2)
69.3 Cu. Ft. Marion Paddia, CS
60 Cu. Ft. Marion Paddia, CS
60 Cu. Ft. Genico Dbl. Cone, 30485
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50 Cu. Ft. Genico Twin Shell, SS Sant. Finish
37 Cu. Ft. Genico Twin Shell, SS Sant. Finish
37 Cu. Ft. Genico Twin Shell, SS Sant. Finish
37 Cu. Ft. Pt. 304 SS, W/ilg. bar.
20 Cu. Ft. Pt., Twin shell, SB
16 Cu. Ft. Pt. Twin shell, SB
16 Cu. Ft. WC Marion SB
10 Cu. Ft. WC Marion SB
10 Cu. Ft. Wc Marion SB
10 Cu. Ft. Pt. Shell, Twin Shell 1 ½HP
10 Cu. Ft. Pt. Sant. Twin Shell 1 ½HP
10 Cu. Ft. Pt. Sant. Twin Shell 1 ½HP
10 Cu. Ft. Howes, CS, Dbl. Rbn.
5 Cu. Ft. SB, Dbt. Cons W/Ilquid-solids bar
10" Pt. Zig zap

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1-8' dia. x 50' Bartlett Snow Rotary Dryer, SS, 100 HP. 1-8' dia. x 50' Louisville Steamtube

Rotary Dryer, SS clad, 40 HP.
1-11'6" x 70' lg. Bartlett Snow
Calciner, 316SS, 1100°C., com-

1-11'6" dia. C.E. Raymond Separator, single whizzer, CS constr.
1-24,000 Gal. Mix Tank, SS constr.,

16' dia, x 16', 20 HP. 1-20,000 Gal. Storage Tank, SS constr., 16" dia, x 14'.

2-10,000 Gal. Storage Tank w/ickt., SS constr., atmos. Int., 150 psi jekt.

1-10,000 Gal. Mix Tank, SS constr. 13' dia. x 10', 30HP. 1-10,000 Gai. Mix Tank w/int. colis, 13' dia. x 10', 30 HP.

1-Marley NC Tower, 88"W. x 14'6" L. x 9 H. 1-1130 sq. ft. Micro-Pul Reverse Jet Dust Collector, CS constr. *Large Quantity Silos. Many Screw Conveyors Available-various

sizes. CS & SS construction.

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4RW
1,000 Gal. Pfaudier, RA60 Series, 1002
FV/90 pel, 4DW
1,000 Gal. Pfaudier, RA60 Series, 1002
FV/90 pel, 4TW
800 Gal. SS clad, 60/60 pel
750 gal. DeDietrick, Phila drive

500 Gal. Pfaudier, 100&FV/85 psi, BH

Stainless Steel

Stainless Steel
4,000 Gal. 316SS, Atmos./50 psl, withcolis
3,000 Gal. 347SS Blaw Knox, 150/50 psl
2,500 Gal. 347SS Blaw Knox, 150/50 psl
2,500 Gal. Nooter Autoclave, 316L 2000
psl, FV int. colls
2,000 Gal. Dusenberg, 316 SS,15/35 &
FV int., 50 psl jkt.
1,750 Gal. 316SS Noite, 1467/50 psl
1,500 Gal. 304SS, 10 HP Lightnin
1,500 Gal. 304SS, 10 HP Lightnin
1,500 Gal. 304SS, 250/80 psl
1,000 Gal. 316SS, 50/75 psl jkt

1,000 Gal. 316 SS, 100/30 10 HP 750 Gal. 316SS, 75 & FV/50 pel

750 Gal. 31685, 75 & FV/50 psi 750 Gal. 30486, 50/60 psi 800 Gal. 31685, 3000psi, 10 HP 800 Gal. SS, 50 psi, 1.5 HP XP 500 Gal. 31685, 55 & FV/55 psi 450 SS, 50/75 psi 100 Gal. 31685, 15/50 psi 100 Gal. 316ELC SS, 500/90 psi

*** SPECIAL OFFER *** 4-DRAIS SAND MILLS, TYPE PM-80-STS-DDA, MANUFACTURED 1984-85. PRICED TO SELL • CALL FOR DETAILS

MIXERS

4.5 Gal, Kneader Master Cont., SS w/jkt.
5 Gal, AMK 304SS Jcktd. Kneader Extruder
15 Gal, W.C. Readcc Sigma Blade Dbl. am
25 gal. Readco DBL/Arm Sigma Blade jkid. SS
construction 15 H.P.
80 Gal. Hockmeyer Pony, SS contacts, 7.5 HP

varispeed
100 Gal., SS, Sigma Blade, Jcktd. 40 HP
200 gal., W-P CS dole arm Sigma blade, 20 HP
250 gal. AMK Kneader Extruder, Sigma
Blades, CS construc, 40 psig, trough jkt.
500 liter Welex hi Intensity, SS contact parts
500 Gal. S-W Rubber Centent, CS, 2-10 HP

Tool Gal. S-W Rubber Cement, U.S. Motion motors (2)
Unused 1000 Gel. Sanitary 316SS B-K DN, Motion Change Can; 100&FV/165 PSI, 125HP
Littleford Model FKM-600D, SS
Littleford Model FKM-800S, SS
Littleford Model FKM-2000, SS, w/choppers
7 Cu. Ft. 304SS Nauta Model MBX-70
10.8 Cu. Ft. Nauta D-105, CS
Welding Eng. Model 2FV1V2S Twin sciew Extruder, SS, Contacts, 180 psi
Koehring mdl. 350, 40 HP
NEW/NEVER USED 75/37.5 HP Hockmayer

PLUS LOTS - LOTS MORE

LICENSED ASBESTOS REMOVAL (201)390-9550 TELEX:642-863

COMPLETE PHARMACEUTICAL/CHEMICAL PLANT

PLANT WAS IN OPERATION THRU APRIL OF 1986

COMPLETE PLANT EQUIPMENT FOR SALE INCLUDING:

COMPLETE SYSTEMS

PROT...FULL SCALE MANUFACTURING EQUIPMENT, PLANT UNLITHES

ALISTON BENEFIT WITH CONTROLS, PLOWS, SET UP FOR NITROGEN PURCE FACH REDVISUALLY SEID MOUNTED

48"x24", 40" x24" CHARPLES HYDRAUTIC DRIVE (6)

罗杰尼斯里思思 医高温电影

DOUBLE COME VACADES ASSAULT BE DISSE INCH GAL. 60 CO. 11.

PEARDLER GAT, ACCURT THE SYSTEMS

PEARDLER GAT, ACCURT THE SYSTEMS

DEVINE 31655, (1) 30, (2) 40, (3) 50 GH FF, 5YSTEMS

31695 ROTARY VACUUM DEATH ACTES (0) 100, (1) 120 CU. FF. SUBLES OF ACTUM DEVICE TYPE FMS

VARIOUS SIZES & MATERIALS OF CONSTRUCTION

SS & CS ROTARY VAC. DEVERG: 125, 100, 20, 80, CH. FT.

FILTER PRESSESSES OF LARGE TORS OF A PROSE

STAR ART DOWN OF A THE CHARGE WAS BY STAR ART DOWN OF A THE CHARGE WAS BY COMMON OF A THE TERM SYSTEMS

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DAUGRMEISTER TURBOMIC, 40 HP, COMPLETE CYSTEM FITZPATRICK MOLDES DASO 7.5 HP COMBINIORS

ENTORETERMINES HP, MOR. MATERIALIS

OTHER RECHARMS CHEMICALL. COLDEN MARKETS... COMMERCE RECEIVED AND ARRESTS...

DISTILLATION ECOPPUBLISH

1,300, (2) 1,250, (0) 1,100, (7) 500, (2) 300, (1) 10 GALLON

FIRE PERCENTANGE CACARORPENCATA... CORRECTED... BARRONSES...

CLASS LINED: (1) 3,000, (7) 2,000, (22) 1,000, (8) 560, (2) 300 (1) 200, (1) 130, (4) 100, (4) 50, (1) 30, GALLON

ALL REACTORS EQUIPPED WITH I'V DRIVES, MECHANICAL SEALS MANY WITH

STAINLESS STEEL: 316 & 316 ELC (1) 4,000, (1) 3,000, (3) 2200, (6) 2,000, (1)

11 SS JKT. AGIT. KEYTLES FROM 750 GAL. TO 5,000 GAL.

TANKS/PROEIVERS GLASS LINED RECEIVERS & CHEMSTORS (2) 2.000), (10) 1,000 (1) 500, (4) 250, (5) 100, (2) 50 GALLON

STAINLESS STEEL
STAINLESS STEEL
300, (1) 4,000 (1) 3,000, (8) 2,000 (3) 1,500, (4) 1,000, (1) 800, (7) 500, (1) 300, (3) 250, (5) 200, (1) 150, (3) 100, (3) 50 GALLON

GLASS LINED: (2) 10,000, (1) 5,000, (2) 2,000 GALLON
STAINLESS STEEL 316SS & 316LSS: (10) 10,000, (1) 8,000 (3) 7,500, (2) 6,000,
(3) 5,000 (3) 4,000 GALLON
KYNAR LINED: 30,000 GALLON

HERESITE LINED: (1) 10,000 GALLON LITHCOTE: (1) 10,000 GALLON RUBBER LINED: (3) 10,000 GALLON FRP: (1) 12,000 GALLON

IF YOU ARE BUILDING A NEW CHEMICAL PLANT OR

EXPANDING A PROCESS YOU MUST VISIT THIS

LIQUIDATION SITE

STEEL: (1) 15,000 (1) 8,000, (2) 6,000, (7) 1,000

VARIABLE SPEED DRIVES, GLASS RECEIVERS & GRAPHITE HEAT EXCHANGER

[4] ([1]) [4] [4] [4] [4]

TANDERS CHOISE THE MINE THE PROPERTY OF THE STANDARD CONTRACTOR OF THE STAN PRIMALENSE SE DOUBLE MARINE DE CONTRA LE SUITANTE SE LO COMPANIO ESTA CO

over 15,000 phecies of process equipment in stock...call today: CHANTE LIEDUIDATE

900 GAL. 304 SS READCO MIXER SIGMA SHARPLES 318SS MODEL P-3400 CENTRIFUGE (3) UNUSED 1900 aq. fl. Heat. C Exchanger

2 - POWDERED COATING PLANTS

Fine grinding lines Spray drying lines Compunding lines Packaging systems Colding lines Equipment installed and can be

operated in place-All equipment Now 1980's- We will sell/rent/lease/or sell individual pieces Call for further dotails

ALABAMA PLANT LIQUIDATION

(3) 290 CU. FT 316 SS ROT. VAC DRYER SYSTEMS 10'x 14' EIMCO ROT, VAC, FILTER NASH H9 VAC, PUMP W/FULLER V300 BOOSTER REACTORS

(4) 3,000 GAL, 316 SS 80/30 HP AGIT, 100 PSI INT. W/COILS

(1) 3,000 GAL, 55 30 HP, 6TW, 300 PSHNT, W/COILS (2) 2,000 CAL, 3164, SS, 75/200 PSI JRT 71213140E

15,000 GAL, 346 LSS AGIT, 10'6x 23' 5,500 GAL MOREL YERTICAL (3) O,000 GAL, MONEL MERTICAL SUSCEDIFICATION OF A STREET AND A SUSCEPTION OF A SUSCEPTION O 4,000 GAU GAU PEAUDIER CHEMSTOR 30 PSI A TREAT EXCHAIGEBRANOM TOO TO BOD SO, IT.

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Miagara Halls/New York Area 700,000 Sq. Ft. Buildings... 50 acres of land 750,000 Sq. Et. Buildings... 35 acres of land Plants manufactured Carbon Electrodes Equipment Highlights: 5 Model 5057 Raymond Hi-Side Holler Mills in operation IIII Sept. 1985

40 High-Intensity CS jkt. mixers similar to Littleford's Electrical sub stations and switch gear **Dust Collectors and Material Handling Systems** Carbon Extruders / 57", 40", 30", & 22"

84" Lathe... New in 1974 14000 Ton United Hydraulic Downstroke forging & forming press Complete vertical Autoclave System... 13' dia x 26'4", 347 SS, 150 psi & 0.1 MM vac. & @ 700°F

Complete in plant Railroad... flat cars/hopper cars/locomotive

UPE WILL SELL/RENT/LEASE COMPLETE FACILITIES OR SELL EQUIPMENT PIECEMEAL CONTACT: RON GALE FOR DETAILS 609-443-4545

Synthetic gas plant

NEW 1976...

COMPRISED OF TWO TRAINS 60 ACRES OF LAND Air Compressors . Boilers . Heat Exchangers . Instrumentation • Pumps • Pressure Vessels • CO2 Removal System • Power Generation System • Water Filtration • Demineralization System • Steam Generation System • Fisher DC2 Digital Computer Control Center. WE WILL SELL ENTIRE FACILITY OR INDIVIDUAL

PIECES OF EQUIPMENT FOR MORE DETAILS AND

FOR SETTING UP AN IMMEDIATE INSPECTION CALL OUR SALES DEPARTMENT NOW! 609-443-4545 CALL IF YOU HAVE SURPLUS EQUIPMENT OR

PLANT SITES FOR FURTHUR INFORMATION PLEASE CALL 609-443-4545

TO RECEIVE OUR FREE 300 PAGE ENCYCLOPEDIA OF CHEMICAL PROCESS EQUIPMENT CALL OUR TOLL FREE NUMBER 800 CHEM-CAT (800-243-6228) IN N.J. - 609-443-4545

) December 8: 1986

... ICHEMICAL MARKETING/REPORTER

F. December 8, 4986

KETTLES-REACTORS, SS

30.000 gal. 304SS fermentors, 14" x 24", 25 psi/yee 30,000 gal. 304SS fermentors, 14" x 24", 25 pai/yac. colls, 200 HP agil. (4)
5,000 gal. 304SS, atm. int., 75 pai jkt., agil.
4,100 gal. 304SS, atm. int., 75 pai jkt., agil.
3,500 gal. 316SS kettie, 16 pai jkt., 7½ HP agil. (2)
2,500 gal. 304SS reactor, 75 pai/FV int., 180 pai jkt.
1,500 gal. 304SS ketties, jktd., 5 HP agil. (3)
1,500 gal. 74 yadfer 316 L SS reactor, FV / 180 pai, 5 HP agil.
1,150 gal. 304SS reactor, 15 pai int., 25 pai jkt., 5 HP agil.
900 gal. 304SS reactor, 300 pai int., 75 pai jkt., colls (3)
500 gal. 304SS reactor, 150 pai jint., 150 pai jkt., 5 HP agil.
300 gal. 304SS reactor, 150 pai jint., 150 pai jkt., 5 HP agil.
300 gal. 314SS reactor, 75 pai/FV int., 160 pai jkt., 5 HP agil. 300 gal. 31895 reactor, 75 pei/FV int., 60 pei jkt. (50)... 31895 and 30495 reactors and kettles from gallon to 400 gallon... call for first.

BIG PFAUDLEH 316SS NEACTORS

(3) 15,000 g zl. Plaudler, 316SC. 12'6"x 15', 100 psi, 200 pcl jkt. Agr. 3) 10,000 gal. Plaudier, 3168S, 11'6"x 12'4", 100 psi, 180 psi, jkt. Agit.

REACTORS-GLASS

2 gal. Pfaudler, 750 pai/FV, 700 pai jkt., 20 gal. Pfaudler, 35 pai, 100 pai jkt., agit. (2) 30 gal. Pfaudler, 18td., 100 pai jkt., agit. (2) 30 gal. Pfaudler, 18td., 100 pai jkt., agit., 1975 100 gal. Pfaudler, 25 pai, 100 pai jkt., agit., 1975 100 gal. Pfaudler, 25 pai, 90 pai jkt., agit., 18td., 18t

LIQUIDATIONI CHEMICAL/POLYMER PLANT....ILLINOIS BUY BEFORE REMOVAL AND SAVE!!

Bird 32"x 50", centrifuges, 316SS, contour (2) Welex 8" Extruder, 700 HP, 30:1 L/D (5) Welex 8" Extruder, 400 HP, 30:1 L/D (2) Consir 24" pelietizer, 40 HP (2) Renneberg 5'x 25' 304 SS rot.

dryers, 10 HP, (3) Sweco & Keson 60" screens, SS (2) K-Tron 7000#/hr. twin screw volumetric feeder, SS, (5) Pfaudier 1,500 gal. 316L SS reactor, FV/-

180 psi' 5 HP agit. (2) Pfaudier 10,000 gal. 316L SS reactor, 150 psi/FV int., 180 psi jkt., hyd agit (4) Worth. Plant air comp., 323 CFM @ 125 pai, 75 HP, Model #4-8B-2 (2) 17,000 gai. & 12,000 gal. 316 SS Tanks (3)

PHONE (609) 267-1600

PERRY for Process

DRYERS Blaw Knox 6'4"x 40" SS vac. dryer, 600 cu. ft.

Blaw Knox 36"x 20" vac. dryer 316L SS, 72 cu. ft. Blaw Knox 66" x 36" vac. dryer, nickel Mathis 24"x48" flaker, chrome plated Sandvik 48"x24" SS belt flaker, UNUSED Sargent 60" x 45" SS conveyor dayer Blaw Knox 32" x 90" dbl. drum Aeromatic #ST-5 fluid bed dryer, 5/10 KG Witte 36" x 10' fluid bed, SS, senit.-cooler Renneberg 36" x 20" rolary dryer, 316 SS 96" x 50" Louisville SS rotary dryer 10' x 100' GATX rot. steam tube dryers, 140 psi (4) emont #VTL-24 Turbo-tray dryer, 3048S P-K 5 cu. ft. vac. dryer, 304SS P-K 20 cu. ft. vac. dryer, 304L SS (2) Abbe 30 cu. ft. 3048\$ vac. dryer Davine 110 cu. ft. 304 SS vac. dryer Plaudier 165 cu. ft. glass-steet vac. dryers (2) Abbe 325 cu. ft. 31688 vac. dryer Devine 370 cu. ft. 316\$8 yec, dryer Devine 564 sq. ft. vac. shelf dryer Niro 30" 58 spray dryar Bowen 72" apray dryer, SS Bowen 96" apray dryer, SS

FILTERS-VACUUM

36" x 1" Dorr-Oliver, fiber glass 9 sq. ft.
36" x 1" Amelek, 316 SS, 9 sq. ft.
40" x 3" Bird-Young, 8S, 48 sq. ft.
4" x 16" Eimco, 316SS, 64 sq. ft., horiz.
6" x 3" Amelek, SS, 55 sq. ft.
6" x 4" Eimco, "Eimcomet" polypropylans, UNUSED
6" x 6" Eimco, SS, 200 sq. ft., precoat
8" x 10" Dorr-Oliver, 250 sq. ft. 8' x 10' Dorr-Oliver, 250 sq. ft., 318SS, precoat 8' x 12' Elmco, 316SS, precoat, 300 sq. ft., (3) 8' x 14' Dorr-Oliver, 316SS, precoat, 350 sq. ft. (2) 10' x 10' Elmco, 316SS, precoat, 314 sq. ft. 118" x 16' Elmco, 56 11'6"x 16' Eimco, SS contacts 12' x 14' Komline, 304SS, 525 eq. ft., flexibelt disch. (2)

FILTERS PRESENTER

54 sq. ft. Funda, SS, jktd.
65 sq. ft. Arilsen "Dynamic" filter/washer, SS (2)
140 sq. ft. Nilsgara # 36-140 316 SB (2)
310 sq. ft. Nilsgara # 310-22, 316SS (4)
600 sq. ft. U.S. Autojet, 316SS, sanit.
1000 sq. ft. U.S. Autojet #1000, 304SS
36" Shriver filter press, 546 sq. ft., hydraulic
42" Shriver filter press, 77 sq. ft., hydraulic
48" Shriver ALP recessed filter press, SS, 276 sq. ft.
48" Poly Filter Co. polypropylans filter press, 2094 sq. ft.,
67 cu. ft. cake, 1983 54 sq. ft. Funda, SS. jkld.

PULVERIZERS

Mikro #4TH pulv... 125 HP, UNUSED (15)
Mikro #5MA stomizer, 5 HP
Nikro #6MA stomizer, 58
Pailman #REF8 pulv., 100 HP
Pailman #PP8 pulv., 50/75 HP
Abbe porcelain pebble mils... 38"x42", 38"x48",
42"x60", 48"x60", 60"x48" (7)
Reymond #6058 HF-side roller mills, dbl. whizzer (2)
Raymond #73612 HF-side roller mills, dbl. whizzer

NEW LIQUIDATION... CHEMICAL PLANT...GARFIELD, N.J.

(4) 31858 packed columns; 16" x 15"; 20" x 12"; 36" x 23" ; 36" x 40" (1) 36" x 46' GWich 316L 88 column, 24 trays (1) 38" x 48' Gillich 316L SS column, 24 trays
(1) 48" dia x 60' high SS tray column
(1) 60" x 60' Gillich 304L SS column, 80 trays, FV/75 pel
(1) 72" x 39' high SS column, 11 tray
(1) 78" dis. x 43' high Rooter SS column, jacketed, 25
psi/FV 150 pri jkt., 20 trays
(5) Niagara Aero heat exchangers, SS contacts
(21) Shell and tube heat exchangers, 315 SS and 304 SS:
12, 41, 92, 213, 297, 300, 320, 393, 400 (2) 431, 480,
522, 524, 527, (4) 600, 1050, 1300 sq.f.
(2) Niagara #70-26 leaf filters, SS, 69 aq.ft.
(1) Niagara #10 leaf filter, 75 aq.ft., SS
(1) Niagara #10 leaf filter, 75 aq.ft., SS
(3) Patterson 200 gal. SS Sigma blade mixers, jktd., vac.
cover, bottom disch., 20 HP
(1) Porter 62 cu.ft. 304 SS dbl. cone blender
(1) 6000 gal. 316L SS tanks, 7' x 16', horiz., colis
(1) 6000 gal. 316L SS tanks, 7' x 17', 21', 80 psi WP, colis
(2) 4500 gal. 316L SS tanks, 7' x 13', 90', yolis
(3) 1500 gal. 316L SS tanks, 7' x 13', 90', yolis
(3) 1500 gal. 316L SS tanks, 7' x 13', 90', yolis
(3) 1500 gal. 316L SS tanks, 7' x 13', 90', yolis
(3) 1500 gal. 316L SS tanks, 7' x 13', 90', yolis
(3) 1500 gal. 316L SS tanks, 7' x 13', 90', yolis
(3) 318 SS and 304 SS tanks; 1200, 1100, 500 (2), 250, 200, 100 gal.

200, 100 gal. (6) 3000 gal. veri. steel lanks, 8' g 9' Jacustrial filter dual unit dionization system, #3653PSA, Type 268, W/(2) 316L 88 columns, 316 S8 exchanger and lank, controls, atc... butt 1976, LSO - 38 pumps (9) rubber-lined lanks on scales to

Over (50) Bird & Sharples decanters

CENTRIFUGES

Sharples P-5400 D-Center, 316SS, Carbide tiles, late (2) Sharples P-3400 D-center, 316SS, tiles (2) Sharples P-5600 D-center, 316SS, Sharples P-560 D-center, 316SS, back drive Bird 12" x 30", 316SS, Decenter, 20 HP Bird 18" x 28", 316\$\$, Decenter (3) Bird 18" x 42" Decenter, steel, 10/30 Bird 24" x 38" Decenter, 3048S, contour-10 Bird 24" x 38" Decenter, 3168S, contour (3) Bird 24" x 60" Decanter, steel Bird 24" x 66" Decanter, SS, 125 HP Bird 24"x 96" decanter, 304SS, 6

UNUSED (3)
Bird 32" x 50" Decanter, Monel, contour (2)
Bird 32" x 50" Decanter, 304SS, contour
DeLaval NX214-31B Decanter, 304SS, 20 HP (2)
Sharples AS16V "Super," 88 (5)
Sharples AS26V "Super," 88 Sharples A828V "Super," SS
Det.eval BIPSV-213-30, 316SS separator/deskudgers (3)
Westfalis SAMN 15037, Deskudger/Separator, 316SS
Westfalis SA14-35-076 3-way separator, 316SS
Krupp 10" pusher, 316SS, 15 HP
Baker-Perkins 19" pusher, 304SS, 40 HP
Sharples 48" T-1600 auto-basket, 100 HP
Tolhurst 48" Batchmaster, rubber lined, 30 HP
Sharples 48" Tornado-Matic, SS, 25 HP
Detaval 48" Mark 111, 316SS hyd.
CENTRIFUGE PARTS... Sharples, Bird, DeLeval, etc.

EVAPORATORS

2.4 sq. ft. Rodney-Hunt SS, 3 HP
21 sq. ft. Rodney-Hunt Turbafilm #4, SS
87 sq. ft. Rodney-Hunt, 304 SS, Turbafilm
100 sq. ft. Praudier, 316L SS, wiped film
600 sq. ft. Goelin-Birmingham dbl. effect, SS
854 sq. ft. Buflovak dbl. effect, SS
1688 sq. ft. Roger dbl. effect, SS
Swenson 316SS cntinuous crystallizer, 9" x 14"

TAMES & VELLERY

30,000 gal., 304SS, 14' x 24', colla, 200 HP agit. (4) 20,000 gal., 304SS, 12' x 24' (2) 17,000 gal., 304SS, 11' x 24' (3 17,000 gal., 316LSS, 14'x 13', Agit. (2) 12,000 gal., 316LSS, 12'x 14', Agit. (5 10,500 gal., 316L SS, 8' x 25' 10,400 gal., 304SS, 10'6" x 16', agit. 8,000 gal., 30458, 10'8' x 12' 5,000 gal., 30458, 0'x9', 25 HP agit. 3,500 gal., 30458, 8'x9' 3,000 gal., 30458, 7'x 10', agit.

MIXERS, BLENDERS

3.5 cu. ft. Henschel #FM15D, 17/20 KW 11.5 cu. ft. Henschel #115JSS, 92/46 HP 13.7 cu. ft. Lodige #W600/K1200, mix/cool comb. 20 cu. ft. P-K lwin shell SS 33 cu. ft. Abbe high intensity, SS, 40/20 HP 35 cu. ft. Day Nauta, #NBX350, SS 52 cu. ft. Nauta 304SS mixer (2) 60 cu. ft. Gemco ,TW SH, Sanit, SS 69 cu. ft. Patterson dbl. cone, SS 70 cu. ft. Day Nauta, #NB700, 10 HP 75 cu. ft. Day Nauta, SS, [ktd. 75 cu. ft. Robinson SS ribbon blander, [ktd. 98 cu. ft. Day Nauta, SS, 1981 110 cu. ft. J.H. Day, dbl. ribbon, 318SS 1 to cs. r. d.r., dey, doi, nopon, 3 1033 1 20 cs. ft. Cleveland ribbon blender, (5) 144 cs. ft. 3048S dbi. ribbon blender, 30 HP 189 cs. ft. Pfaudler, dbi. cone, glass steel jktd., vscuum 200 cs. ft. Young, ribbon, 88

NEW LIQUIDATION

ULTRA-MODERN 5000 TONS/DAY BEET SUGAR PROCESSING PLANT & REFINERY BUILT 1978, UPDATED 1983...LOCATED EASTERN CANADA, NEAR WATER... **VERY BIG SAVINGS IN TIME &** MONEY...CALL FOR DETAILS!

NEW & UNUSED PROCESS EQUIP., 1982. IN ORIGINAL PACKING .. SOUTH CAROLINA, CALLI Phone (609) 267-1600

BALERS, Dispozapak #D600 balers, (2) BALENS, Disposapar #Doco balers, (2)
BAG PACKER, Howe-Richardson #G-S-17 semiautomatic bagging system SS contacts
BINS, 304L SS contacts, 1300 cu.ft./9720 gal.

CENTRIFUGE, Bird 24"x96", 304SS, Model 15 solid bowl continuous, 10 deg. contour bowl, Tungsten carbide tiles on conveyor, 150 kp CHLORINATION SYSTEM, Wallace & Tlernan COLUMN, 46" dia. x 15"9", 30488

CYCLONE, DuCon Model 700/175 304S8 high efficiency cyclones, size 210, Type VM(8) DRYERS, Nooter 4' x 14' rotary vac. dryer, 3184 SS shell and jacket, incoloy ribbon sell ASME 100 psi/FV int. & jacket, 100 HP

FURNACE, C-E Air Co. "Cor-Pak" thermo oxy dizers, direct gas fired MIXER, Air mix blender system, Koppere-Sprout Waldron #36-50, 500 cu.ft., 304SS MIXERS, Webb, 59" W x 15'L twin shaft paddle mixers or pug mills, 304SS contacts, (2) PULVERIZERS, Mikro #4TH pulverizers, 125 HP

drive, (15) "ACTEM CALL"... POLYMEN COMPOUNDING PLANY...(CA) (DEGIT, M.L. CALL MASH, WINEY. @ (69%) 2000 pider

(2) Munson 300 cu.ft, blenders, 104" dia #TS-300GB, pkgd.

(1) Munson 110 cu.ft. blender, 90" dia #700/110, pkgd. (2) Munson 90 cu.ft. blenders, 80" dia

#7TS90, pkgd. (2) 400 cu.ft. Gruendler ribbon blenders (2) 215 cu.ft. Cleveland ribbon blenders (2) Eirich 10' dia. Intensive mix muller

motorized pan and mullers (2) Komilne dbl. cone blenders; 320 cu.fi (10' dia.), 69 cu.ft. (6' dia.) (3) Gruendier hammermills. 150 HP. 1980

) Gruendler hammermills, 100 HP, 60 H Mikro #8D atomizer pulverizer, 30 HP Mikro #4TH pulverizer, 50 HP 2) Saw tooth brakers/crushers (2) St. Regis baggers (1) "Push-Pull" railcar unloading system

(25) Flexkleen, Dustex, etc., bag type dust

2) Box sifters (1) Handling system w/(2) 2000 ibs. eleve tors, 80' powered roller conveyor, etc. ALSO...laboratory with lab apparatus, ta bles, equipment, etc.; motor control center unite; Gardner-Denver air compressor; etc., etc.



Poly Filter co. 48" polypropylene fill press, (100) chambers, 2094 sq. ft., 87 cu. ft. cake, hydraulic...1983, CALLI

JUST PURCHASEDI...(9) Patterson & Abbe batch ball mills & pebble mili, varous sizes... CALLI

* REACTORS *

400 gal. 316 SS Reactor 90/500 psi half 1,500 gal. 304 Ele Dim., Jktd. vac. Reactor Comington 1500 gal. Monel Clad Reactor Kowalk 3000 & 750 gal. SS Reactor dimple

Haldler 500 gal. G/L jktd. vac. Reactor Mardier 2000 gal. SS dimple jktd. Reactor Mardier 9200 gal. G/L Reactor 90/90 psi

ERAINT PLANT LIQUIDATIONS *

ing prist steek iktd., tab bali mill op grinde Dissolver, vari speed, hyd. de Coulee Dissolver, fixed mit & speed priste dissolver, vari speed to coulee Dissolver, vari speed to coulee Dissolver, vari speed, hyd.

(New Course Dissolver, Jab.

(New Course Dissolver, Jab.

(New Course Dissolver, Jab.

(New Course Dissolver, variabeed

(New Mile John Mixer

(New Mile Job Jak, 1861, 30HP

(New Mile Job Jak, 1861, 30HP

(New Mile John Mixer John Mixer)

(New Mile John Mixer)

(New Mixer) -Mgal 98 Dispersion Tank (50)

JLM

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* BLENDER & MIXERS *

-30 cu. ft. Dbl. Cone Blender -150 cu. ft. Dbl. Cone Blander -Baker Perkins 150 gal. C/S jktd. vac. flusher -Devine 100 cu. ft. Dbl. Cone Blender, C/S -J.H. Day 23 cu. ft. SS Ribbon Blender -J.H. Day 40 cu. ft. CS Ribbon Blender (3) -Nauta Mixer 70 cu. ft. SS 10HP (2) Patterson Kelley 1 cu. ft. Twin Shell SS 500 lb.

-Patterson Kelley 30 cu. ft. Twin Shell Blender Patterson Kelley 40 cu. ft. Twin Shell Blender

-Patterson Kelley 1500 cu, ft. C/S Blender 75HF -Patterson Kelley 4 qt. SS Twin Shell/liq. solids -Paul O. Abbe 90 cu. ft. SS/sanlt. jktd. vac. -Readco Sigma Blade Mixer 10 gal. SS Dual Level (Like New) -Ross 10 gal. Planetary Mixer SS

-Ross 15 gal. SS jktd mixtruder 7½ HP mdi. AMK -Strong-Scott 200 cu. ft. C/S Ribbon Blender

* GRINDERS & MILLS *

-Alpine Sieve Model #A-32-100 LS -Cumberland Grinder Size 14 -Entoleter Comptact Mill, Type ElM, SS,

-Fitzmill Model #D-6/DSAO/12, 30 HP SS -Greerco Colloid Mill, 3HP & 5HF -Micro Pulverizer 4 TH (3) -Ross 3-roll Mill 4½''x10 -Rotex Screener 2'x4' -Rotex Sifter 1'x3' -Simpson Mueller 6"x5" size 2 VD mixer

-Sweco Separator 48"/30"/24"/18"SS

J. Little Mercer Co., Inc.

254 Hornbine Road Rehoboth, Mass. 02769

(617) 679–1901

* FEATURED ITEMS *

* CENTRIFUGES * -Bird Centrifuge C/S 40"x60" Solid Bowl w/ -Bird Centrifuge C/S 18"x28" Contour Bowl -Bird 36"x50" 347SS Contour Bowl Patierson Kelly 1900 sq. 0.88 Heat Es-changer 150/150 per Swecq Separator 50° CB simplestack (5)

-Sharples 12" SS Lab Model/Brighton Lab -Sharples P-600 Decenter SS -Sharples P-3000 Decanter 30HP -Sharples P-5000 Decanter SS 100HP -Sharples Centrifuge 12" SS solid bow! w/

-Abbe 20 cu. ft. SS Conical Vac. Dryer -Aeromatic Fluid Bed Dryer Lab. MDL-15 -Aeromatic Fluid Bed Dryer SS MDL 100ST * PILOT & LAB * -Bowen Spray Dryers 71/21 & 51 SS
-Fitzpatrick Fluid Bed Dryer SS Lab MDL #75
-Gemco Dbl. Cone vac Dryer 10 cu. ft. SS Jeffery Fluid Bed Dryers 2'x20' SS (2)

-Patterson Kelley Twin Shell 1&3 cu. ft. vac.

-10 gal, \$5 jkt. Reactor W/cell? Chamineer Drive 180/150 pal FV thit 750? -Abbe Sell Mill SS jkt 16"321", 1 HP-Abbe SS Pabble Mill Type #8, 16 gal, 2 co. t. -Aeronato Fluid Sed Dryer \$5 15 KG Mdf

-Pfaudier Conical vac. Dryer G/L 72 cu. ft compl. sys. -Standard Hersey 4'x30' Rotary Dryer SS
-Stokes 5'x30' Rotary Vac. Dryer, jktd., SS
-Stokes Vac. Shelf Dryers 48.9 sq. ft. (7)
-Strong Scott Rotary Vac. Dryer SS 3'x12'
Solldaire

★ FILTERS ★

★ DRYERS ★

-Patterson Kelley Twin Shell vac. Dryer 75

-Patterson Kelley 5 cu. ft. SS Conical Vac

Dryer.

-Bird (Pannevis) Filter SS, 12"W x 17'L -Eimco 4'x12' Vac. Belt Filter 316 SS -Enzinger Leaf Filter SS 360 sq. ft. -Evirex SS Rotary Filters 6 x 6

-Funda Filter 4' dla., SS, Jktd. w/20HP Drive -Hercules Filter 500 ag. ft. 316 SS -Industrial Filter 100 sq. ft. Type 122 lD 21

MDL OMD -Shriver 36" ALP 316 SS, 41, 48 Cham (2) -Sparkler Filter MDL #18 D-4 SS jkt/SS 8-6 -Sperry 42" Plypro Filter Press 48 Chambers -Star SS Filter Presses 18" (5) -US Autolet Filter SS 50 sq. ft. -US Autolet, 750 sq. ft. MDL #750, 316 SS

-Tolhurst Centrifuge 26" SS perf. basket

estia Adlenti J. 49, ft. wiped illim Evadorator SS: Ognand Arlisen 8 pal. 916 SS Reactor sys 180/300 psi Baker Perkins Sigma. Wixer SS [kid. vac. jab.]

: lab. -Cowles Disspiver 1 HP-MDL #1VG(2) -Greeco Collold Mill 10 Liter especity, 3 HP -Lutieford High int Batch Mixer, 85, FM 1300 -Mantin-Gaulin 85: Homogenizer, 2 HP-Mdi Morehouse Lab SS Sand Mill 14HP Mdl

Nettco Dissolvet 7.5HP (4) -Petterson Kelley 4 qt. Lab SS Twin Shell Blender Type LS-S-4 Liquid-Solids -Petterson Kelley SS Twin Shell Blendar 1 cu. ft. 500 lbs. dens.

-Plaudler 5 gal, G/L, jkt. Reactor 120/150 TW Orive, Excel Glass -Readco 5 gal. Sigma Blade Mixer C/S jkt.

-Rose SS 2 gal. Lab Planetary Mixer MDL #130EL SS [kt, Bowl (2) -Sherples Lab Centrifuges Model No. 600 SS -Stewart Bolling 2-Roll Mill 3"x7" 1HP -Bweco Vibro Mill 24" Mdl #DM1 Poly Tolhuret Basket Centrifuge 58 26"x12" 120 ibs. cu. ft. -Union Process Attritor .33HP/Lab. Type ISV

EQUIPMENT INVENTORY SYSTEM

^{le couldn}'t find the computer inventory system we needed so we byeloped it ourselves. Now we're making it available to the industry. san equipment inventory system with a unique query capability that Mows you to find a specific item by size or functionality. It runs on an BM/PC and just like the PC it's within everyone's price range. all Jim Balkum, Computer Division (713) 471-4900

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PRICE REDUCED

liple effect evaporation system — Sodium Service two trains — 600 lon/Day — Mfg. by Swenson, Monel Construction. Each train consists damonitor tank with cone bottom; 60 HP Elbow Pump each effect and 33300 Sq. Ft. Exchanges Per train; CS Shell and monel tubes. 40 PSI both sides at 290 Deg. F both sides.

SODIUM CHLORATE SILO SYSTEM

Consists of (6) 18' dia Silos at 6500 cu. ft. each, all interconnected with dia screw conveyors, discharge system designed to convey 15 iph of product at 80#/cu. ft., bucket loading system designed to handle 25 TPH of product at a rate of 40 FPM. Complete with rotary dyer, recycling system and rail loading station. New 1961.

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CENTRIFUGAL COMPRESSORS

By Make, Model, and ACFM

ı						
l	Model	ACFM				
Allis Chalmers		Clark (Cont.'d)		Eliott		
ı	VT204	1315	3M5	5350	46M86	17300
ı	DHM3	1890	3M3-2	5800	42H2	18453
ı	V-403	5900	2M6	5840	Ingersoli R	and
ı	V-402	9110	24X24	6750	MMGB-1220	170
١	DH4M	10400	3M-5	7608	MMGB1321	232
Ì	Brown Bov		553B7	8361	MGA733	1775
I	VWO 609	20900	3H4	10620	CVS-12	2015
l	VW0609	21000	3M-6	10700	TYPE L AXI	2472
ı	V907BD	34000	3H4	11950	CDP-416	2540
ı	Carrier	0+000	3H4	11950	CDP-416	2540
ı	18VT352	3350	4H4	19365	MGG633	2550
ı	18P351	4180	4M3	20200	MTG633	2810
ì	18W453	4740	.M4	21600	900X20	2960
ł	18W452	6270	4M6	21600	TYPE L-AXI	3510
l		7200	5H4	23850	CII40M2	4220
ı	18V470	10700	·4M	25600	MGG633	4730
ı	18PM451L	12000	6H4	39100	CVS14	5800
I	18PM451Y	17790	B5H	52180	MGGB	7270
۱	18WV502	31900	6M3	56500	MGA642	7500
ı	188601		6M3	98300	CVS-14	8750
ı	Cooper Bess	emer 277	DeLava		CVS-14	9360
Į	RB9-8B		2C	3260	MGA-177	36150
1	RB9-8B	445	6C148	5980	MMA-3100	54200
ı	RB9B	1048	Demag		MMA-4100	57750
ı	RB6B	3446	VK63	45100	Joy	
ı	RC8B	3525	Eiliott	40100	TA25V	2440
I	RF2B24	13100	29M-9	3055	TA-30	3280
١	RE7S	18773	29MS-9	3055	TA-30	3280
	RE8-75	30000	18HV470	3360	GMSG12	10868
	Clark			4390	Rotoflo	
٩	1M8	550	29MS9-8	4390	60K	6755
ı	1M5	1110	29MS9-81	4390	Worthing	
	1M9-8	1477	29MS9-8	4750	GUR-356	3980
1	1M9-8	1477	29M7	4750	GUR-4K2	7050
	2B	1611	29MS8-7 *	6610	VC706	11300
٠,	2M9 ;	1966	40P	7093	DEMAG	24000
	2M-7	2223	29M3	7450	York	2.7001
•	3M6 🔭	2403	38M8-4I	7400	23268A	2830
٠.		2/00	38MS	9481	20200/	

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CHEMICAL MARKETING REPORTER

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December 8, 1986

CHEMICAL MARKETING REPORTER

December 8, 1986

CHEMICAL PROFILE Du Pont Has 'Tough' PET

n-PARAFFINS

CAPACIT
5
2:
1.0

'Millions of pounds annually of C₁₀ and higher normal paraffins. Shell consumer most of its production internally for making linear alcohols. Vista uses most of its output captively for linear alkylbenzene production. Texaco sold a refinery in Pointa-Pierre, Trinidad to the state-owned Trinidad and Tobago Oil Company, Ltd., in March 1985. Trintoc operates an n-paraffine facility rated at 200-million-pounds-peryear- at the refinery. Texaco used to export half this output to the US, but due to feedstock limitations, Trintoc has not shipped any n-paraffins to the US this year. Profile last published 11/7/83; this revision, 12/8/86.

1985: 665 million pounds; 1986: 680 million pounds; 1990: 735 million

Historical (1976-1985): zero growth; future: 2 percent per yer through 1990.

Historical (1965-1986): High, 22c. per pound, bulk, works, detergent uses; low, 41/2c. per pound, same basis. Current: NA

Linear alkylbenzene, 68 percent; exports, 16 percent; linear alcohols, 10 percent; solvents, 4 percent; chlorinated paraffins, 2 percent.

The success of liquid laundry detergents such as "Liquid Tide," coupled with several reformulations of powdered detergents with higher surfactant levels, has given a strong boost to LAB and n-paraffins demand in the past two years. The sharp decline in crude oil prices in 1986 have lowered kerosine prices, the main raw material in n-paraffin production.

WEAKNESS

As recently as five years ago, up to 80-million pounds per year of n-paraffins were consumed in citric acid production. Since then, though, the market has gone entirely over to less costly feedstocks such as com starch and molasses. Chlorinated paraffin demand has sunk in line with the weak oil drilling market.

Penetration of LAB-based surfactants into the home laundry detergent market has nearly peaked, and future growth will track the GNP. Raw material availability has hindered the production of n-paraffins in Trinidad, but it is not considered a major problem in the US.

For Packaging Applications

E.I. du Pont de Nemours & Co. has ers for waxes, pastes, and household cleanintroduced a versatile new intermediate ers. performance barrier plastic, which the company thinks should substantially expand the use of PET in food and solvent

"Selar PT," the most recent addition to Du Pont's "Selar" barrier packaging plastics family, shows excellent solvent resistance and moerate oxygen barrier properties, and can be extruded or blow molded into flexible

The product is described as a "toughened" PET; the reinforcement process uses proprietary technology, currently being licensed The resins are said to have all the physical characteristics of PET except for clarity, yet require no crystallization or orienting for

Using "Selar PT." containers can be made using economical processing methods for which ordinary PET is unsuited; they can be injection molded, blow molded, and blown or cast into film, according to Richard A.L. Eidman, "Selar" barrier resins product man-

Economial processing, along with good solvent barrier properties, make "Selar PT" the first plastic resin capable of displacing large, wide-mouth metal and glass containers in a wide range of applications, including non-denting, non-rusting plastic cans for solvent-based paints and varnishes, and contain-

Currently, metals predominate in these areas; plastic is used only in packaging later

In food packaging, "Selar PT" resins are said to offer flavor and product compatibility superior to high-density polyethylene pre-venting flavor scalping, and moderate mosture and O₂ barrier properties. Containers made with the resins can provide better ory. gen barrier than HDPE containers for large size food service products.

As temporary shelf life products become the norm, Du Pont expects "Selar PT" to become a "workhorse product" in the growing disposable packaging market, offering better barrier properties than cheaper plastics without the "overengineering" and higher costs of EVOH and comparable bar-

Du Pont is marketing six different grades of resin, in pellet form. Three of these grades & will be used in industrial applications," the others, all FDA approved, will be markeled! for food packaging.

Prices for the plastic will range from 70. cents per pound to \$1 per pound. Spokesman for Du Pont say that the plastic is recyclable.

Another Du Pont product, "Selar RB." a modified nylon resin, was recently approved by U.L. for use in non-reuseable storage coa-

European Chemical Industry Called Adaptive but Vulnerable

After more than a decade of painful adjustments, European chemical firms "are lean and adaptive and can face an uncertain future with some confidence," according to an industry analyst.

David Ingles, of the London securities firm Greenwell Montagu, also issues the now-familiar caution, though, that the European industry is "extremely vulnerable" to the buildup of capacity in new producing regions, such as the Middle East.

"The overall additions to global capacities are huge and in a number of products they equate to or even exceed the total existing capacity in Western Europe," Mr. Ingles pointed out in an address before the Chemical Industries Association in London.

Noting the European chemical industry's dependence on international trade, Mr. Ingles says Europe's ability to remain competitive in export markets, as well as in its home markets, will be the most important issue facing industry through the end of this cen-

The emergence of new producing regions means that further rationalizations will probably be necessary in the European chemical industry to insure stability and adquate returns on investment. "This will probably require not only a further reduction in capacity but a reduction in the number of producers," Mr. Ingles says.

"My personal view," he adds, "is that a further reduction in the number of producers is a greater priority than the straight elimination of capacity.

He says he hopes this can take place in part by the withdrawal of the weaker players and also by such arrangements as the joint ven-ture in polyvinyl chloride initiated by Impe rial Chemical Industries PLC and ENI.

On the whole, Mr. Ingles says he does not see a need for a "further massive reduction" in capacity levels in Europe, observing the current plant operating rates are very high for some products.

And he warns chemical manufacturers about the need to invest, as well as rationalize, noting that the average age of petro-chemical plants in Europe is about ten years

Without such investment, he says, the chemical industry risks going the way of the

IOBS & PEOPLE {{{ }}} JOBS & PEOPLE **Agro Ingredients** Names Two Managers

Agro Ingredients, Inc. has appointed Richard Dabeck director of industrial sales and marketing and Gloria Anderson product manager for powdered treasures and food product sales

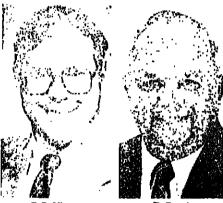
Mr. Dabeck joins Agro Ingredients, Inc. from Emery Chemicals of Cincinnati, Ohio. Mrs. Anderson joins Agro from D.D. Williamson & Co. of Louisville, Ky.

The appointments are part of Agro Ingredients, Inc.'s realignment of the company's marketing department into two groups.



R. Dabeck

to the newly created position of automotive market development manager at Polymer Composites, Inc... FRANK R. BAGSHAW has been named director of industrial and oil field marketing at the Kelco Division of Merck & Co.



LARRY C. SHELTON has been named director of international business development at Ralston Purina Company... CASEY L. COR-DON has been appointed technical sales representative for the Coatings and Additives Division of Hercules Inc... TONY L. WHITE has been elected corporate vice-president of Baxter Travenol Laboratories, Inc., respon-



Alan F. Hume, who has been named marketing director for the food and cosmetic color business of Morton Chemical and Williams, division of Morton Thiokol Inc. He will be based in Chicago and be responsible for developing the Division's business in North America.

sible for the company's diagnostics business

EDWARD E. GILLESPIE has been appointed general manager of chemicals and products supply and ALBERT E. RUSCILLI has been appointed manager of engineering at Amoro Corporation ... WILLIAM P. RAY-MOND has been named vice-president and general manager of Badger Engineers, a subsidiary of Raytheon Company.

J.M. CANNON has been elected chairman of Croda International and K.G.G. HOPKINS has been appointed to succeed him as group



Pfaudler Appoints Two Managers

Pfaudler Company of Rochester, NY has named Bruce M. Beckwith manager of the company's Alloy Business Unit and William A. Carlson manager of materials and of process and product development

Mr. Beckwith previously held the position of product manager in the Alloy Business Unit. He joined Pfaudler in 1985 after moving from a position as product manager in

Mr. Carlson, with Pfaudler for 31 years, leaves his most recent assignment as manager of research and development to manage materials and process and product develop-



chief executive... DANIEL TOUSMAN has oined UNIMED, Inc. as director of market-

DR. THOMAS J. HOPP has been elected



BUSINESS BRIEFS

head of the department of protein chemistry and DR. DAVID L. URDAL has been elected head of the department of biochemistry at Immunex Corporation... JEAN-PIERRE TIROUFLET has been named director of financial services at Rhone-Poulenc in

MEETINGS CALENDAR



December 8, 1986

JANUARY

CHEMICAL INDUSTRY ASSOCIATION, luncheon meet-CHEMICAL SPECIALTIES MANUFACTURERS ASSOCI-ATION, 73rd annual meeting. Marnott's Harbor Beach Resort, Fort Laudentalo, Fla., December 7-11. ing. Parker Meridien Hotel, New York, January 29. SOAP AND DETERGENT ASSOCIATION, 60th Annual Meeting and Industry Convention. Boca Raton Hotel SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS and Club, Boca Raton, Fla., January 29-February 1 ASSOCIATION, 65th annual dinner, Windows on the

LATER ON

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, center for chemical process safety, international conlerence on chemical safety Issues, Omni Shoreham Hotel, Washington, D.C., Fabruary 3-5.

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS. 12th annual Spring workshop and exhibition, Skyline Ottawa Hotel, Ottawa, Ontario, Canada, April 27-30. CHEMICAL GROUP OF NATIONAL ASSOCIATION OF PURCHASING MANAGERS, mid-Winter conference, "Purchasing — Opportunity in a Changing World," Baton Rouge Hilton Hotel, Baton Rouge, La., FebruHEMICAL MARKETING RESEARCH ASSOCIATION, Houston Meeting: "The US Chemical Industry-Responding to Change." Westin Galleria Hotel, Houston.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCI-ATION, 73rd mid-year meeting, Chicago Mariott Hotel, Chicago, III., April 26-29. CHINACHEM '87, Internation mical industries, China International Exhibi-

tion Center, Belling, China, April 3-9. CHLORINE INSTITUTE, Winter meeting, Mayflower Hotel, Washington, D.C., March 15-19.

DRUG, CHEMICAL & ALLIED TRADES ASSOCIATION, 61 at ennual dinner, Waldorf-Astoria Hotel, New York, March 19; Spring luncheon, Sheraton Centre Hotel, New York, N.Y., June 11.

FERTILIZER INSTITUTE, 1987 annual meeting, Marriott Orlando World Center, Orlando, Fla., February 1-3. FIRE RETARDANT CHEMICALS ASSOCIATION, Interna-Nonal conference on flame retardancy and fire sefety. Sheraton New Orleans Hotel, New Orleans, La.,

INSTITUTE OF GAS TECHNOLOGY, 11th annual sympo-

INTER-SOCIETY COLOR COUNCIL, scientific conference, Williamsburg Lodge, Williamsburg, Va., February, Ph. P. 1911 85th annual meeting, Convention Center, San nio, Tex., March 29-31; 12th international p cal conference. Convention Center, San Amono,

POLYURETHANE MANUFACTURERS ASSOCIATION Tex., April 5-7 Spring meeting, commercial development of new castable systems, Fairmont Hotel, Dallas, Tex., April 28, 20

SOCIETY OF THE PLASTICS INDUSTRY, 42nd annual conference of the reinforced pleatics and composite institute, Cincinnati Convention & Exhibition Center. Cincinnati, Ohio, February 2-6.

THE FERTILIZER INSTITUTE, 1987 Annual Meeting Marinott Orlando World Center, Orlando, Fla., February

WSINESS BRIEFS

NO FOAM PRODUCTS Company has and its new technology and develop-Coller in Atlanta. The center includes a assurance laboratory, a process deducts makes foamed polystyrene Dice items, packaging trays and inlicis at nine plants throughout

ANDUSTRIES Corporation, Bristol, panding its film and sheet produc-bilities for the manufacture of thin m to the % mil range, according to pany. The thin film production capaecied to be operational by Febru-A and is designed to enhance the composition in high-performance 4 and processes.

경영 N. Sispp, who has been appointed administer for Velsicol Chemical Corpo-tal specially chemicals sales and market-1714 lie will oversee all business activities

woodd anhyddide and its deriva

MESR.FERBER has been appointed

ils manager of Takeda Chemical

IS USA, Inc... KATHLEEN V.

LLDA has been named sales service

Tisselative for Union Tank Car Com-

33 Eastern district sales office...

BISTOPHER S. NIGON has been ap-

director of sales and marketing of

AMDRUNDE has been named account

narof the Adhesives Division of Na-

Starch and Chemical Corporation...

MET K. YOUNGS has been appointed

REMICAL Company has launched a exchange resin regeneration pro-

gram, which provides significant cost savings for industrial water demineralization and condensate polishing in the pulp and paper, chemical processing, refining and utility industries, the company says. The program employ about 30 people. Amoco provides plant operators with the data, products and technical support needed to substicostly mercury cell caustic in resin regeneration, according to Dow.

DYNAMIT NOBEL CHEMICALS, Bristol, Pa., has commercialized its first UV curable silicone spilce and embedding resin with a refractive index matched to fiber optic silica. The new material meets the demands of high-speed fabrication processes in optical 'M&T CHEMICALS, Rahway, N.J., has pubcoupling applications, the company says and the company says are included a new brochure describing its line of used by the carbonless copying paper industry. Virginia Chemicals has been selling the

two buildings in the Great Valley Corporate scribes 10 "Thermolite" stabilizers for PVC west of Philadelphia. Long term, Kodak plans to create a pharmaceutical business focused on prescription products, in-vivo diagnostics and over-the-counter drugs.

HENKEL CORPORATION'S Organic Products Division has introduced a new line of seven different pearlescent concentrates, which provide specific pearlizing agents for a variety of personal care product manufacturers' needs, the company says. Formulations using the "Standapol" and "Euperlan" pearlescent products were developed in Henkel's US applications laboratory.

Center near Nalvern, about 20 miles North- film, sheet and bottles, five FDA-sanctioned "Metablen" impact modifiers and five FDAapproved "Metablen" process aids.

> SHELL has picked John Hellyar & Co. to distribute its UV-resistant toughened polystyrene in the UK. Shell's "Styrosun" product, formerly known as "Hostyren" XS, has been available in the UK since January. following the acquisition by Shell Nederland Chemie BV of Hoechst's polystyrene plant in Breda, the Netherlands.

VIRGINIA CHEMICALS INC., a whollyowned subsidiary of Celanese Corporation. plans to build a plant at one of its US sites for the manufacture of KMC, an odorless solvent Pennsylvania as the headquarters location: "Metablen" impact modifiers and process for its Pharmaceuticals Division. The first aids for use in the production of PVC plastic Company of Japan, since 1982 in the North phase of the division's plans call for leasing packaging. The 6-page brochure lists and de-

December 8, 1986

CHEMICAL MARKETING REPORTER

THIS WEEK

THIS MONTH

SALES ASSOCIATION OF THE CHEMICAL INDUSTRY.

NORTHEASTERN CHEMICAL ASSOCIATION, annual

December luncheon, New York Athletic Club, New

normal Christmas party. New York Hilton Hotel, New

The Psychology of Selling," Treadway Inn., Saddle

York, December 18, education committee, sominar,

World, New York, N.Y., Decomber 11.